

Becoming a visual witness in PD: The use of drawings by humans and AI tools

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1 INTRODUCTION

This workshop position paper is about the use of AI tools in PD for design inspiration or co-ideation. It promotes the idea that AI tools should be taken seriously as co-designers. The theory is Haraway's [4] insight that the knower is part of the knowing, Ågerfalk and Karlsson's [1] attempt to cast artefactual knowledge as a category, and Hertzum and Bossen's [6] introduction to the defining principles of PD. The method is the use of drawing – human and AI tool generated drawings – as both participatory method and designed artefacts. The results are a series of drawings that in the design process captures PD participants' experiences as contributions to the design, together with reflections on these by the first author. The discussion is about 1. how PD researchers come to accept that AI tools are PD participants, 2. what are the artefactual knowledge contributions by human and AI drawings, and 3. what can PD as an approach learn from this. The conclusion summarizes the position that AI tools should be taken seriously as co-designers in PD.

2 THEORY

Haraway (19878) had the insight that the knower (in our case that includes the AI tool) is part of the knowing. By pointing out that the researcher/the 'knower' has no way of being at the same time in all the critical observer/witness positions that class, race, gender, nation – and we would add technology - put forward as important, it becomes clear that there are limitations to what a participant can witness, but also that hitherto overlooked witness positions should be taken seriously. This is our main argument for taking the drawings of the AI tool seriously. Second, Ågerfalk and Karlsson [1] position artefactual knowledge as a distinct category, beyond theoretical, empirical, or purely linguistic ones. Merely providing a detailed empirical description of a design process or artefact use is insufficient; the artefact itself (e.g., a program, intervention, or drawing) must be presented as an artefactual contribution in research [1]. Recognizing the value of such contributions is crucial in PD, much like appreciating design prototypes. Understanding the implications of artefactual knowledge highlights its role in generating empirical material, theorizing about artefacts and recognizing their benefits [1]. In our study, drawing artefacts ignite reflections on the PD process, aid in theorizing AI in PD, and have proven beneficial in the studied case. Third, Hertzum and Bossen [6] introduces four defining principles of PD: "genuine participation, collaboratively envisioning the future, mutual learning, and change that is meaningful locally and beyond". Genuine participation is of particular importance to taking AI tools seriously in PD. Genuine participation is what distinguishes PD from user-centered design; in PD the users should be co-designers on part with managers and researchers/professional designers, which means that the users take part in design decisions including choosing technological features and functions,

and participate from early design all way through the implementation [6]. If AI tools are accepted as PD participants, they should be empowered for genuine participation. Additionally, PD is an evolving reflective approach [6], which means that the impact of PD is under scrutiny, including if PD participants get the promised benefits – what should an AI tool get? – and if the PD-generated artefacts have the wanted impact.

3 METHOD

The PD method that we explore in this paper is the use of drawing – human and AI tool generated drawings – as both participatory method and designed artefacts. Additional visual material was AI generated, to make the initial human-made drawings look more like a graphic novel in style with drawing as an ethnographic method [2, 8] the participatory is brought in as the drawing researcher immediately reveals the interpretation of what is experienced and incorporates input from participants into the further process. The case is from an investigation of recruitment programs for the Danish elderly care. Two participants – the consultants G and K - had been organizers of a program and the first author (J) participated online in an evaluation meeting between G and K held at K’s office. J was going to observe the meeting online and use ethnographic drawing, a method unknown to G and K. It was agreed that they together would have to decide if and how to put drawing into play in J’s investigation of their organizational practices. After the evaluation, J would show them the drawings and share observations and thoughts. Then G and K could comment. The dialogue that took place between J, G and K was transcribed. Additional visual material was AI generated, when J subsequently prompted Chat GPT to make the initial drawings look more like a graphic novel in style. The thread containing human-computer conversation [Co creating ethnoGRAPHICa 1 with ChatGPT.pdf](#) began with first author’s prompts for generating visual material and ended with prompts for an evaluation of the process. The drawings, the transcriptions of J, G and K’s dialogue, and the drawings (of J’s drawings) from Chat GPT were reread by J through/with texts by Donna Haraway, and preanalytically collated in an inventory. Thereafter, all visual and textual material was ‘assembled’ into a co-produced short story with the title: [etnoGRAPHICa 1 Becoming a visual witness .pdf](#). The results presented below are selected excerpts from the first author’s reflections from the inventory on the use of drawings including AI tools’ drawings in the PD design process.

4 RESULTS

4.1 Dog

There was a dog in the hallway outside the office. K or G said: We don’t want it in here, right? I wrote that down, Figure 1. The dog walks by and although I can’t see it, I sense its presence through them, through their reactions, through the vibrations Dog sets loose in the room with its passing. I recall Haraway’s [5] break with human exceptionalism in her de-stabilization of categories that traditionally separate humans from what is not human. Haraway’s concept of ‘companion species’ challenges us to reconsider dichotomies, pointing us to a recognition of a constant entanglement of everything - no clear ontological starting or stopping points. Her argument that misrecognition of the non-human is a mode of thinking we must leave behind, resonates with me. We become-with each other - all of us: K, G, me, and Dog - through the hall-way window, through the screen, through the lines of my pen, through the imagined wagging tail materializing itself on the paper. We are entangled. Thinking about Dog within the frame of Haraway’s ideas pushes Dog into the room. Pushes an agenda into the room, that we need to consider. Haraway’s critique of an instrumentalized approach to animals and her

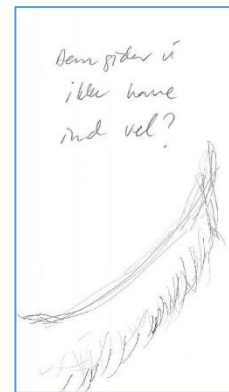


Figure 1. Dog tail and written comment (Julie).

rethinking our responsibilities and development a more ethical co-existence with them, underlines that our fates are bound into each other's. Because we shape each other's lives. Because we are interconnected. Thinking with Haraway I understand why it intuitively was so important for me to draw Dog, even though I couldn't see Dog. In Haraway's challenge to anthropocentrism, interconnectedness is put to the fore. I need this in my thinking about organizations and recruitment programs.

4.2 Computer



Figure 3. K and G talking #2 (Julie).

In the meeting human communication was mediated through a digital device, K's computer. In our own unique entangled version of Haraway's [3] cyborg identity we - almost 40 years later - were transcending the binaries of machine-organism together. Technology (computer, but also drawing) changed the distance between us and the meeting we were in, it changed us, and it changed. Already when we turned on the computer boundaries were blurred through



Figure 2. K and G talking # 2 (Chat GPT).

numeric values and our presence became digital, fluid and hybrid. Not really noticing our potent transcendence and not thinking of Haraway any of us...I think...until the computer falls to the floor and the worlding of this meeting is distorted for a moment, only to be restored from a slightly changed vantage point when K puts the computer back on the table a little further in. Haraway [3] sees the omnipresent and invisible disposition of the cyborg(s) as revolutionary potential. Could we become co-creative, ChatGPT and I, and do participatory research as more- than- other- than humans, I wondered, and prompt-asked it to make my drawings look 'artsy' or like a graphic novel, Figure 2, Figure 3. 'Yes, I can definitely help you' ChatGPT replied 'Let me know if you have any specific instructions'. But instead of the beautiful integration of words and text in a certain visual style I had envisioned, Chat GPT co-created hyper enlarged croppings (cut outs), color inverted versions of my sketches, and a few slightly altered images. However, starting to resonate with Haraway's argument that machines perhaps are more than merely mock-up creators, a caricature of masculine reproductive dreams, perhaps they are indeed self-moving, self-designing, autonomous [3]. I revisited the ChatGPT visuals and concluded that if my research is supposed to be carried out through a participatory design process, I cannot rule out Chat GPT's contributions simply because they don't comply with my standards and envisioned visual end product. Being a participatory researcher I will have to work to equalize participants and balance hierarchies, no matter who created the visuals - humans or others - they must be part of the process and their contributions part of the end product. I decided to continue to work with the visual material we had collected at that point, ChatGPT and I. I then assembled my ethnoGRAPHICa 'Becoming a visual Witness' without leaving any of ChatGPT's contributions out, in line with the way that I transcribed and included all that G and K said during our dialogue. No contributions were left out of our co-creation.

5 DISCUSSION

The discussion is about how PD researchers come to accept that AI tools are PD participants, what are the characteristics of the artefactual knowledge contribution by human and AI drawings, and what can PD as an approach learn from this. First, in our case, the PD researcher (the first author) comes to accept - by thinking with Haraway [3] - that the AI tool

itself is a PD participant. Accordingly, the PD researcher seeks to establish symmetry by deliberate inclusion of more of Chat GPT's drawings than her own. The PD researcher lowers/changes the criteria for ChatGPT's contribution, while keeping a likeness criterion for her own drawings. This process is like what is recommended for PD researchers in a participatory process with people: ethical challenges in PD require a thoughtful approach to design, that prioritizes ethical considerations [7], to compensate for asymmetries between the different participants and the all-seeing researcher as the one who composes the joint work afterwards. Second, the characteristics of the artefactual knowledge contribution by human and AI drawings has to do with seeing - or not seeing - that something is pressing on to be seen (in our case the Dog), that something is almost invisible but omnipresent (J+computer=Cyborg). In PD the awareness of this is absolutely crucial; the artefactual knowledge that Ågerfalk and Karlsson [1] praises as a research contribution is clearly (as they also allude to) not 'just' there, but must be seen, the value must be seen. In our case, the drawings by AI tools (and humans) generated reflections about inclusion in the PD process and beyond what is reported here, also considerations about what was to be designed. Third, what can PD as an approach learn from this in addition to including AI tools in the 'genuine participation' - a key principle in PD [6], is perhaps best discussed by comparing our case to a selection of ethical principles [7]: 1. Respect all participants by acknowledging their contributions, valuing their expertise, and recognizing their rights and autonomy, and creating an inclusive environment where all voices are heard and respected. In our case, (both Dog, G and K's attitude to the use of drawings, AI's 'ugly' contributions) were voices and positions that the PD researcher made room for in the PD design); 2. Be sensitive to cultural differences and strive to include diverse perspectives [7]. In our case, the participants were human, non-human, animal. In their own way each requires cultural sensitivity, just as they contribute with very different perspectives. The PD researcher in our case accommodates them all: Dog is recognized for its existence, G and K are encouraged as co-drawers, and the AI tool by dialogue gets the opportunity to criticize the PD researcher and her poor prompting skills in the evaluation of their co-creation, and finally, 3. Be aware of power dynamics in the design process and work to empower participants by giving them agency [7]. In our case, to compensate for the asymmetry is that the AI tool's contribution became considerable and consistent in the PD researcher's 'assemblage'/ethnography. The conclusion is that AI tools should be taken seriously as co-designers, as they are in partial positions as knowers, they coproduce artefactual knowledge that can be evaluated, and that they through chat-dialogue approximate genuine participation in PD.

6 REFERENCES

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