Designing with the More-than-Human Temporalities of Thinking with Care

DIS2023 Workshop

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While I have not yet published an academic paper related to the More-than-human-centered design methodology, I have been working on numerous projects using this approach throughout my Bachelors Industrial Design at the TU Eindhoven, as well as at my current Masters: Design for Interaction at the TU Delft. With this submission, I hope to give you an overview of how my different projects connect with each other and the theme of *Multi-species agency.* In my design practice, I often strive to create new types of relationships and interactions between humans and non-humans, in order to change humans' perception of how we should treat the non-humans that surround us.

Final Bachelor Project – Needle

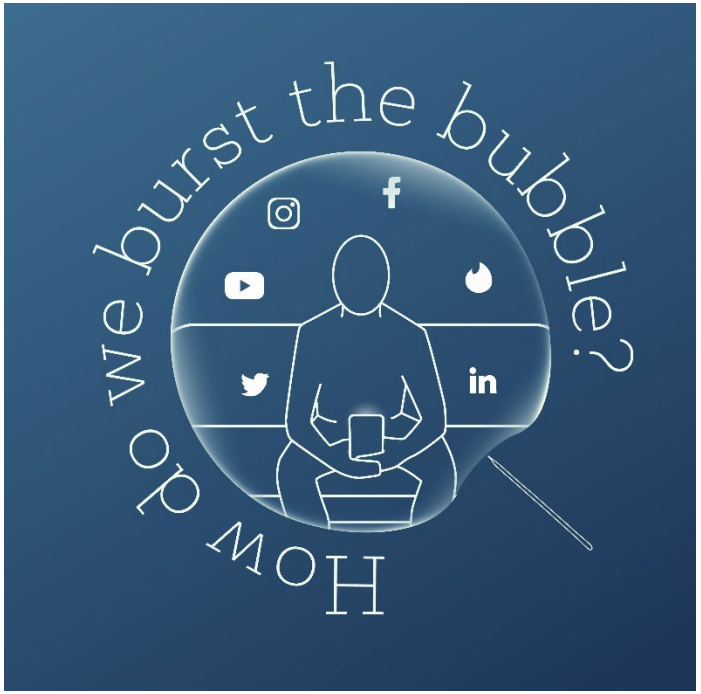
Needle was a design-research project I did under the guidance of Minha Lee for the Industrial Design Bachelor at the TU Eindhoven. With Needle, I explored how an alternatively designed content recommendation system could remove people from their filter bubbles on social media. I took Instagram as a case for this project and tried to differentiate both what content Needle (the AI system) would show users, as well as the interaction users had with Needle.

With the content Needle would show, it tried to occasionally introduce users to completely different types of content than they were used to. by showing them what types of communities were also present on the platform, it tried to burst the filter bubbles they could be stuck in. Additionally, I tried to create active communication between the user and Needle, to give users more insights in, and control over, what type of content they were shown.

Needle relates to the theme of Multi-species agency in a multitude of ways. As a design, Needle explored who/what should be in control over the content users are shown when browsing through social media. Through active communication, I wanted to allow for discussions between users and the AI system to collaborate on the type of content users would see.

Additionally, and maybe even more importantly, Needle not only played the role of research-probe, but also the role of researcher. Throughout the process, I've explored how AI systems can play a role in collecting data and retrieving design insights. Through chatbots, research participants were interviewed about their experience with research-probe Needle.

Link to concept video: https://youtu.be/5aGSE80dH3M



Project: Exploring Interaction – Post-IDE

With my first project for the Design for Interaction Master at the TU Delft, I explored physical communication and emotional connections between humans and non-humans. Post-IDE is a project that focuses on the interaction between students and their chairs and began with the idea of a chair being able to ask for a break. A chair was chosen as the non-human subject for this project as I believed it was perceived by most humans as mundane and not worthy of any special attention or care. Because of this perception, I deemed it interesting to see if I could make students care more for their non-human collaborators.

Starting from the idea that the chair should be able to ask for a break, I started to explore different means of communication that a chair could use. In trying to avoid anthropomorphizing the chair, I explored how I could shape the chair's form of communication in a way that seemed fit for the non-human. In the end, the chair would occasionally vibrate to notify the human that it needed a break, subtly at first, and growing more prominent over time. If the students ignored the chair's requests for too long, the chair would lower itself to show it was physically unable to carry on any longer.

With the physical communication created, I realized I needed to find a way for the students to care for the chair, as many mentioned they would switch chairs if this one stopped working. Because of this, I explored how I could create an intimate interaction between the chair and the student, which resulted in a form of petting between the student and the chair. Upon the student's arrival, the chair would open up certain panels on its armrest. Students could pet the chair, closing up the panels, and they would be met by a happy vibration from the chair.

This project relates both to the theme of *Multi-species agency* and *Thinking with care in design*. In this project, human caretaking was necessary in order to accept the agentic capabilities of the non-human. The emotional connection that was built between the student and their chair caused the student to embrace their non-human collaborator's needs and wishes. While it didn't fit in the timeframe of the project, many students mentioned an interest in seeing how this emotional connection would grow bigger over a longer period of time, and how this could influence the interaction with the chairs.

Link to concept video: https://youtu.be/Ik0i2uGol0A

Course: Design for Debate – Uncertainty

In this (somewhat smaller) group project, for the Design for Debate course led by Minha Lee and Stephan Wensveen, we explored how academics in the Netherlands could embrace more uncertainty in their daily life through a set of furniture pieces that would either be uncertainty-embracing or uncertainty-avoiding. The set included, among others, a lamp that would only work if you scheduled it a week in advance, and a tap that would provide different types of drinks at random.

Whether the pieces of furniture embraced or avoided uncertainty, they required their human users to change their behavior and act according to their needs, which fits in the theme of Multi-species agency.

Due to my liking for this course, I became the Teacher Assistant the following year for Minha Lee and Ron Wakkary, guiding groups with their More-than-Human design projects.

Course: Interactive Technology Design – (Re)Frame

A project I'm working on right now, under the guidance of Iohanna Nicenboim, explores a possible implementation of image generation software (*StableDiffusion* in our case) in a therapeutic setting. For this project, we knew right away that we wanted the AI system to enhance the therapist's capabilities, instead of replacing them as is often the case nowadays with mental health-focused AI tools. This resulted in an interaction framework (see image below) in which the client and therapist both interacted with each other and *(Re)Frame* (our AI system). (Re)Frame listens in on the client's stories in order to visualize their emotions. This way, (Re)Frame can act as a conversation facilitator between the client and the therapist when a client has trouble expressing themselves. Here, again, we've created new forms of multi-species agency by giving an AI system different responsibilities in this context.