Dare to Care – Designing Differently, Imagining Collaboratively

by Rafael Vrecar, May 2023

Have you ever imagined a world different from ours? What would have to change? What should have been different in the past? How could a just and sustainable future look? What role can technology play in it? And what does „planet-centric design" mean?

Let's start on some answers: TU Wien had the pleasure of a visit from Ann Light of the University of Sussex (UK) and Malmö University (Sweden). During her stay in May 2023, Ann gave an exciting talk on planet-centric design and finding socio-technical alternatives (subtext: This will not be tidy.), engaged in exciting discussions with her host group (Human-Computer Interaction), and, most importantly, taught the course "Designing Differently, Imagining Collaboratively: The Need for Socio-Technical Alternatives" as part of the TU Wien Informatics Doctoral School (https://informatics.tuwien.ac.at/doctoral/).

Course Recap

The course was divided into 10 sessions of two hours and each session dealt with different issues, contextualizing and motivating the need of sustainable, planet-centric design.

1st – Introduction & Spectra. After an introduction to the course, every participant introduced their dissertation topic and, to get to know each other better, different spectra exercises were conducted. This was done by using the floor as real-life coordinate axes and people positioning themselves where they think their personality/experience is most suited. Examples were: Where do you see yourself regarding theory vs. Practice; raising new questions vs. developing novel solutions; and where in the world are you from geographically? We were also asked to look 30 years back and then 30 years forward within our research area. Stepping into the future raised many kinds of uncertainty.

2nd – Temporal. The second session was the longest one and involved prototyping with "junk" that students had brought along (this will not be tidy!). In order to set a narrative for the (three different) groups, briefs had been prepared in advance and people dealt with different scenarios of how the world would be if something had been entirely different than our current reality. This involved elaborating on paradigms where movement was at the center of everything, or being committed to see every form of live as equal and worthy of

respect (instead of the human at the center of the world). Another scenario revolved around rubber as the most important resource of the whole planet. Students worked in groups to make up these worlds, from their different starting points, and then made things to show the values that pertained in each.

3rd – Spatial. On the next day, "World Machines" were discussed. In our setting, world machines (as per Ann Light et al.'s 2015 definition) were considered to be a special kind of socio-technical system which draws together tools that combine computational powers with a social agenda of cross-world collaboration, i.e., putting a focus on shared world resources. Motivating the need for this global sharing concept, different applications for sharing were presented, e.g., micro-libraries, communal tool sheds, community gardens, time banks, etc. After looking into these examples, the possibilities and needs offered/met by sensors, networks, computation, etc. were evaluated. Then, the students discussed world machines from three different viewpoints: as resistance, as utopia and as a story. These discussions were enhanced through a calm atmosphere in the grassed courtyard of Favoritenstraße.

4th – Time. Space. Matter. The next session concerned reflecting on values. Where the first two workshops played with time and space, in this one, it was discussed what matters most to us, beyond our roles as designers and engineers. This dialogue was facilitated by questioning: which living process (any, really) one would like to observe closely, what makes us happy and grateful, and which aspects of the past we consider to be enriching and positive. Boxes and threads were provided as material representation of the contents of the students 'thoughts about what ties them to the world'. This session was, paradoxically, while conducted in probably the most calm environment of the course, also the most intense one.

5th – Tensions. The new week started with examples of current events which are based on tensions or cause tensions and where simplistic views can obscure the dialogues necessary for constructive future-making, e.g., AI and its implications, climate change, protest marches. After this input, a debate with two completely opposing stances was set up. One group had to take the stance that AI will – unconditionally – provide us with great gain and unimaginable benefits in the future and the other that AI is the root of all evil and will not do anything but harm society. The groups had 20 minutes to prepare an initial argument for their stance and then 20 minutes to react to the opposing initial argument. After this, a debriefing elaborated on the experiences of eliminating obvious tensions and polarizing discussions.

6th – More than Human. The sixth session dealt with ecology and the fact, that the human is not the only species living on planet Earth. It considered the Rights of Nature and other ways of including more life in our decision-making. We tend – if at all – to think about people-centric approaches in designing technologies, rather than planet-centric ones. In this context, we elaborated our different perspectives via a technique called "that made me think of …". The technique was an example of how to have a discussion that contrasted with the previous day's debate and facilitated a conversation which did not close down arguments or end where it started. However, this process revealed connections, which were not obvious at first – working in a relational way to discuss relational matters.

7th – Future Cultures. This session briefly provided input on how future cultures could look and what impact culture in general has on the planet. According to Ann's slides (where she acknowledges the "Culture Declares Emergency" initiative: https://www.culturedeclares.org/), it convenes, renews and transforms, builds capacities for actions, and lets humans learn. Afterwards, we discussed the assessment of the group project to consider how we might make change with the group task we had been set - and how it should be judged.

8th – Initial Presentations and Discussion. In the second last of our collective sessions, we saw each other's projects as they were being developed. At that point, the three group projects focused on: tensions regarding nuclear energy production and technologies; endangered swamps and how technology can support their revival and care for them; and wild-life reclaims, where a conflict between humans and the environment has led to fatal consequences. All projects were supported by either videos, presentations, web- and app mockups, or handouts and displayed considerable conceptual work and a lot of preparation to share these ideas with each other.

9th – Reflective Talks, hosted by the HCI group. The ninth session was divided into individual reflective talks where the students shared their learnings, elaborated on their stances and how they changed or evolved within the course, and thought about what to take away.

10th – Final Presentations, Coffee, and Cake. The last session included the final presentations of the group projects and coffee and cake as a harmonic finish for an amazing three weeks. One project even has a blog now: https://nuclearparks.tumblr.com.

Student Comments

Alessio: "Coming from a different background, the course managed to guide me into a new way of interpreting the usual problem-solution iteration of engineering, taking into account also the solution's human and social implications. Additionally, it showed me how this process is not a solitary one, but there are plenty of other people willing to collaborate to achieve a better future, to bring a benefit not only to a few people, but to humanity and the planet as a whole."

Ekat: "Being fairly new to the topic, it was really nice to see how 'design 'can encompass such a vast array of meanings. Designing as a practice is not just creating finished, closed-off artifacts that neatly fit into a set of pre-defined problems. Instead, designing can take place through collaborative thinking, telling stories, and experimenting (with artifacts). It can be messy, it can be lo-fi, it can bear contradictions and tensions. And yet, this approach to design is so generative as it embraces the complexities of human and non-human life and opens up so many different avenues for how we can live together in this world. Overall, the course was a beautiful start to my journey as a PhD student."

Kay: "As a discipline that has seen a third wave in which human-centricity is increasingly becoming best practice, Human-Computer Interaction still needs to wholly embrace planet-centricity and include other living beings in visions of technology futures. Ann has handed us a variety of essential tools with which to hone our practice as advocates for a more relational and environmentally oriented HCI. TU Wien needs more courses that make space for the organic, the emotional, the messy, the growing, the unclear. We have learned that if we don't dare to dream, we will never really solve problems - just manage them more efficiently."

Mahyar: "The title of this course, 'Designing Differently, Imagining Collaboratively,' correctly captured its content. It was concerned with 'design' because we discussed ideas of a better future for nature, including humans. It was 'different' in the sense that rejection of the status quo was implicit, so freedom of thought was allowed. It was a 'collaboration' as we shared our ideas and tried to craft an artifact together. A high level of 'imagination' was required, as we cannot make a better future if we do not imagine it first."

Marina: "I learned a lot in this course, not only new concepts like planet-centric design, but the whole process was very enlightening with different workshops every day. I think it fostered a very creative atmosphere in the group and made me think about topics I had never thought of."

Rafael: "For me, the course revealed that, as an HCI researcher, I mostly thought about people-centric technologies, rather than planet-centric ones. I now firmly believe that we also have to put the planet and its variety ecosystems into consideration when assessing the impact technologies have, and the benefit or harms, respectively, they might bring. On a personal note, I want to thank Ann for her interesting insights, and for putting students' perspectives in the center of all her work."

Ann Light and her Talk

As mentioned in the beginning, during her stay, Ann also gave a talk on planet-centric design, details regarding said talk and about Ann are to be found here: https://informatics.tuwien.ac.at/news/2411.

Further reading about Ann's work

Ann Light (2022). Ecologies of subversion: troubling interaction design for climate care. interactions 29, 1 (January - February 2022), 34–38. https://doi.org/10.1145/3501301

Markéta Dolejšová, Cristina Ampatzidou, Lara Houston, Ann Light, et al. (2021). Designing for Transformative Futures: Creative Practice, Social Change and Climate Emergency. *Creativity and Cognition*. Association for Computing Machinery, New York, NY, USA, Article 3, 1–9. DOI: https://doi.org/10.1145/3450741.3465242

Ann Light (2021) Collaborative speculation: Anticipation, inclusion and designing counterfactual futures for appropriation, Futures 134.

Yoko Akama, Ann Light and Takahito Kamihira (2020) Expanding Participation to Design with More-Than-Human Concerns, Proceedings of PDC'20. https://doi.org/10.1145/3385010.3385016.

Ann Light, Alison Powell, and Irina Shklovski. 2017. Design for Existential Crisis in the Anthropocene Age. In Proceedings of the 8th International Conference on

Communities and Technologies (C&T '17). Association for Computing Machinery, New York, NY, USA, 270–279. https://doi.org/10.1145/3083671.3083688.

Ann Light, Margot Brereton, and Paul Roe. 2015. Some Notes on the Design of "World Machines". In Proceedings of the Annual Meeting of the Australian Special Interest Group for Computer Human Interaction (OzCHI '15). Association for Computing Machinery, New York, NY, USA, 289–293. https://doi.org/10.1145/2838739.2838832

CreaTures Framework: https://creaturesframework.org/