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CART 360 Critical reflections Fall 2021

Our Symbiotic Relationship

"Our Symbiotic Life: An Exploration of Interspecies Relations." is a research project that explores the possible socio-cultural and environmental developments of humans, nature, and technology in the future through design fiction and prototyping different scenarios. Scenarios communicate a possible future, but they are bound to our current time and socio-economical context (Blyth, 2014). In their research paper, Katja Budinger and Frank Heidmann present speculative scenarios that are designed to solve different sets of what they call "wicked problems". Their research had a focus on technology and their work imagines and embodies possible socio-cultural, environmental, and economic relations futures embedded with technology.

The researchers create four scenarios, that share the same themes around climate impact research, that potentially could be possible if technology and plant research advances. They developed several prototype stages for each scenario by sketching out their general fictive ideas first, then taking into account the materials they were going to utilize. The different iterations of experimenting helped narrow down the meaning behind their work. They come up with four Shared Socio-economic Pathways which embody a different set of possible socio-cultural, environmental, and economic relations futures.

In Scenario 1, *Harmony* has a theme of democracy, collaboration, and sustainability. The prototype presents a green self-driving landscape that heals people with each plant's properties that it is transporting while also allowing for collaborative harvesting. People make collaborative decisions, which creates a delay in responses. Here, consuming sustainably is encouraged and climate change effects are imagined to be reversed, step by step. **In Scenario 2:** *Invasion*, pollinator drones get infected if they pollinate the invasive species Equinops Cupidus, and they become hard to contain. The socio-economic context is imagined to be an authoritarian form of governments facing the unpredictable while dealing with food insecurity and the massive plague they must eliminate. The researchers explain that this scenario was meant to be far from a dystopian future. **In Scenario 3:** *On Demand*, plants are being exploited and used as eye-candy by humans. People live in an unconcerned, carefree timeline where

they believe that biotechnology will solve climate-change, and inter-breed plant species and grow them for the sole reason of fashion and trends. **In Scenario 4:** *Bottle Garden*, DIY battery kits that are made possible from the evolution of pollution and waste into eutrophic algae. Children keep these species alive and use them to charge their mobile phones and devices, they're charging are very weak and thus slow. In this imagined socio-economic context, people who live in poor areas are left to figure out their own ways of adapting to climate change.

The term Design Fiction was first seen in Bruce Sterling's book called Shaping Things, where he defined it as "*the deliberate use of diegetic prototypes to suspend disbelief about change.*" (Bosch, 2012). When speaking about design fiction, the diegetic prototype represents the design and physicality that could exist in a fictional future that we envision just like in movies.

"Design fiction is a way of exploring different approaches to making things, probing the material conclusions of your imagination, removing the usual constraints when designing for massive market commercialization — the ones that people in blue shirts and yellow ties call "realistic." This is a different genre of design. Not realism, but a genre that is forward looking, beyond incremental and makes an effort to explore new kinds of social interaction rituals. As much as science fact tells you what is and is not possible, design fiction understands constraints differently. Design fiction is about creative provocation, raising questions, innovation, and exploration." (Bleecker, 2009) In their research, Katja Budinger and Frank Heidmann jump into the fictive context of people sharing goods, making decisions, and collaborating to create this green ecosystem collectively to get rid of climate change conditions step by step. What is the ideology behind humans arising from inequality to share goods and collaborate on matters? "All design is ideological." (Ward, 2013) A better question would be, what would be needed for present-day humans living in the current unequal socio-economic structure to transform and induce the behavior in *Scenario 1: Harmony*? The same question applies to the different scenarios. The answer will make the irrational fiction closer to a rational possibility.

Bibliography

Budinger, K. Heidmann, F. (2019) 'Our Symbiotic Life: An Exploration of Interspecies Relations, DIS

Blythe, M. (2014) “Research through design fiction: narrative in real and imaginary abstracts”, ACM

Bosch, T. (2012) ‘Sci-Fi writer Bruce sterling explains the intriguing new concept of design fiction’, Slate Magazine

Bleecker, Julian. (2009) ‘A short essay on design, science, fact and fiction’

Ward, Matt. (2013) ‘Design Fiction as Pedagogic Practice’

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Exploring the Design Space of InterActive Urban Environments

In '*Exploring the Design Space of InterActive Urban Environments*', the researchers examine already existing interactive installation pieces or exploratory sketches that are designed to induce healthy and active reactions from people in an urban environment. The researchers "invite the community to consider how digital technology can help understand and shape human behavior in urban environments, and provide inspiration to designers and practitioners." (Renswouw, Vos, Wesemael, Lallemand, 2021) The reflections that resulted from their analysis of different design cases highlight insights that are meant to inspire artists and researchers.

Concepts are laid out along with an informed critique of 11 already existing interactive installations, and design cases are drawn to evaluate the works in terms of design and technology. The typical interaction modalities that are commonly seen in such public interactive installations include light (LEDs) or sound to trigger auditory and visual feedback. There are other challenges and explorations that are taken into consideration such as weather conditions, intensive outdoor use, and vandalism.

"As the digital and physical environments continue to intersect with the expansion of smart city initiatives, it is only a matter of time before accessibility standards in this field are officially defined" (Pease and Fasoldt, 2019) A significant issue would be more inclusive and is important to consider when critiquing an urban design idea or piece is accessibility. The interactive installations that the researchers studied in the paper might not accommodate people of different abilities. Isn't it the duty of designers at this time and age to start pushing for the integration of Barrier-free design in our interactive experiences? One barrier present in an installation mentioned in the paper are the protruding elements such as the ones on the sides of the road in the image in *Run!*

In such a study, It would have been interesting to hear the feedback of people living in the local neighborhoods and boroughs of which the interactive works are installed. In an interviewing section, answers to questions like "Would you be interested in seeing more of this?" and "Which do you prefer?" would make these installations more inclusive and efficient for the public, planners, and developers altogether. (Wainwright, 2017)

Bibliography

Wainwright, Oliver (2017) ‘Tinder for cities: how tech is making urban planning more inclusive’

Loes van Renswouw, Steven Vos, Pieter van Wesemael, Carine Lallemand (2021) ‘Exploring the Design Space of InterActive Urban Environments’

Pease, Emily and Fasoldt, Ruth. (2019) ‘Tech Accessibility in Public Space: Implementing TalkBack on Link’