

## **Our Symbiotic Life: An Exploration of Interspecies Relations**

*“Our Symbiotic Life: An Exploration of Interspecies Relations”* Explores the relationship between humans and greenery in a few possible future scenarios and applications through design fiction. Each scenario works to solve or improve a different “wicked problem”, global issues that are incredibly complex and may even have no solution as things stand right now. These scenarios are divided through Shared Socioeconomic Pathways (SSPs), “a set of five qualitative descriptions of plausible future changes in demographics, human development, economies, lifestyles, policies, institutions, technologies, environments, and natural resources.”(1350) In this reflection, I will be evaluating each scenario in terms of concept, practicality and plausibility against the SSP they are presented with. This is an interesting exploration as it feels like plants are often overlooked as a medium but they have some incredible potential and beautifully organic by their very nature. As living entities, they add a factor of symbiosis and evolution not possible in interpretations of the future that are based purely on technological advancement. For example, in popular science-fiction and other design fiction worlds there is hardly a plant to be seen- everything trends toward robots, AI and a depressingly dystopian 1984-esque atmosphere of media control and privacy invasion. The radically different vision of the future these scenarios that offer is refreshing to see, despite how far they require you to suspend your disbelief.

### **Scenario 1: Harmony**

This scenario is the next step for urban gardens, featuring autonomous, communal use, plant and nature powered vehicles. There is a strong focus on collaboration and social equity to address environmental degradation and sustainability issues. These vehicles take a fantasy-like appearance and integrate advanced technological features and they certainly paint a compelling picture but doing even a little bit of research on the potential of plant energy puts this scenario into the realm of fantasy as well. The visuals alone make me wish this could be a real thing, but the first thing I think of when seeing these is the weight to plant habitable surface area ratio required, even disregarding these as commuter vehicles. Add to that how much of a collaborative effort is needed in maintenance and potential vandalism, this would require a tiny, extremely tight-knit and relaxed population. However, this scenario mentions change in urban cityscapes and Fig.7, which demonstrates commuters waiting in a manner that no commuters have ever waited in, ruins the experience for me.

### **Scenario 2: Invasion**

This scenario focuses on a hyper-evolved plant-based universal “enemy” to the continued

prosperity of mankind called the Equinops Cupidus- The greedy thistle. This is a scenario which addresses the growing political unrest across the globe and shares a bit more in common with the usual design fiction tropes. I think there is some value in the idea that plants form a symbiotic relationship with machines. A plant doesn't care for complicated international or interpersonal relationships. Where humans are overly complex and emotional, a plant only has one goal. A single-minded entity with no potential for internal conflict or even intended malice, capable of taking over machines in a technologically dominant era is certainly a terrifying idea to contemplate.

#### Scenario 3: On Demand

Personally, this one is my favourite scenario. It calls attention to the materialistic, consumerist nature of capitalist Western societies such as the one we live in, and plants have the potential to become incredibly beautiful creations. Plants are already very popular with the younger population as they offer fulfillment with very few responsibilities. If this were to become a real technology as 3D printers have, I think it would definitely take off. With social media culture, a "stick it to the man" attitude and a desire for things that are DIY-able, cheap and sustainable, this idea really resonates with my generation as I see it.

#### Scenario 4: Bottle Garden

While there is merit in the idea of the "poorer" teenage population, turning to the internet as a way of escapism, I think this expands to people of other demographics depending on their socioeconomic situation. This fixation on teenagers specifically and the way they are described gives me a weird feeling of a caricature, and a disconnect with what actual teenagers are like. It makes it somewhat more difficult to focus on the concepts actually being explored in this scenario. The sense of danger (accidents and gang involvement) also make it seem strange that this wondrous material would be so widely displayed, with one teen pictures having his setup out in the open for everyone to see.

In conclusion, these are very interesting concepts but it also proves how the presentation can make or break a scenario. This manner of design fiction can be a powerful tool to "encourage radical thinking or deep immersion"(Scenario 3) but it is also evident that when not done well, the illusion is irreparably shattered(Scenario 4). This also depends on individual interpretation. While I didn't really feel the connection between the 4 scenarios, being so different from each other, they definitely got me thinking about future possibilities and the roles plants may take regardless. I would say as a goal, to "inspire further research on this topic" was a success.

External references:

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## **Taste your Emotions: An Exploration of the Relationship between Taste and Emotional Experience for HCI**

This reading was a lot more scientific in nature than the previous one and essentially boiled down to having participants rate experiences on a scale of bitterness to sweetness. It was also very dry and used a lot of scientific terms that required a significant amount of outside research to understand. Perhaps I missed the entire point of the study, but from the title alone, I was disappointed when I actually began reading through the paper. The introduction offers a range of possibilities in taste-related research thanks to new food printing technologies offered by companies and developments like nufood. Not to discredit the research done by Gayler, Sas and Kalnikaitė but this felt like more of a taste test of what nufood was capable of, with HCI and taste interaction otherwise, as an afterthought. I was equally as inspired by the possibilities the concept brought about in my mind, as I was disappointed when it failed to meet any and all expectations.

This reading starts off with an anecdote about how the idea of a frustrating website was evoked by cold, bitter coffee, drawing a simile between the displeasing taste and dissatisfying user experience.(1279) The introduction then goes on to showcase approaches and growth in the field of taste-HCI experience. It mentions how the five major taste groups of sweet, salty, bitter, sour and umami are mapped to emotional triggers in the brain, and how this could be used to enhance virtual experiences. This is something I've seen explored in both fictive and nonfictive literature and found extremely interesting. For example, when alcohol aficionados such as the one behind [whiskyanalysis.com](http://whiskyanalysis.com) are able to write entire essays on the history, flavour and depth of a single whiskey. It's fascinating because I can neither understand nor appreciate whiskey the way they do but others can, and I feel like I would like to experience the same thing by the sheer beauty in the descriptions. In comparison, a study limiting many factors of the flavour experience (no visual, mouthfeel or smell factor, just taste) seems bland and not much to do with interaction at all.

The study specifically asked participants to rate things by associate a flavour on the scale of very bitter to very sweet against a sports game, product ratings, and two flight booking websites, one that was well designed and one that was not. The two non-digital interactions(Block A) were done blind, as in the participants did not know the full range of flavours beforehand, while for the UI-based interactions, they had the knowledge of previous tastings. While I think there was some interesting potential when participants did not know the full range of flavours, once they knew, it was essentially just rating the UI design on a one to five scale of approval. Beyond

proving the point that people associate “sweetness” with positive feelings and “bitterness” with negative ones, this study does not prove much. Results were also fairly inconclusive unless it was at the extremes of all the scenarios and wasn’t very consistent. Even the comments on page 1284 and 1285 were more about the experience of eating the 3d printed food, than anything related to HCI.

The part I found most interesting was on page 1285, where participants were asked to propose their own tastes when compared to scenarios.

*Example foods being “hot, buttery toast” [favorite food suggested for a 5- star product rating, P16] or “Carrots because I hate carrots” [least favorite for a big defeat, P10]. In addition, participants identified foods relevant for that specific scenario, or what we called flavors: “I am always relating post game beers [to] watching football.”*

Just reading the scenarios participants were asked to rate, I had a few instant food associations of my own. For example, buffalo wings I instantly associate with sports games even though I am not a sports fan through the idea of “game food” being sold to us. It also notes how certain flavours can take us back to nostalgic or notable moments in life, the same way smells can. I think the paper does raise many interesting ideas and applications for taste in HCI, it just fails to live up to what it is describing. “The key new insight in this direction is the value of mouth as a novel space for bodily interactions.”(1286) It is definitely an underexplored medium of interaction for the limitations surrounding it, and the 3D food printer, if commercialized could provide a way radically change this aspect of emotional immersion.

External references:

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