

EMIGRATE TO AXZAYLIA

a report on a speculative design project

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University of Oslo, Department of Informatics

The brief summary of the report

The report describes the experiences with “Emigrate to Axzaylia”, an interactive installation designed to engage people in Oslo in reflecting over emigration politics ran by their government. The installation was developed using Research through Design (RtD), i.e, the practice of using design thinking, design process and artifact as inquiry methodology. It was part of our semester long and project based course in interaction design. “Emigrate to Axazaylia” was made to criticise the emigration policy in Norway and explore the opinion of Oslo’s population about this matter by using reverse thinking in creating a future speculative scenario. The report presents our findings from observing people interacting with our system, reflections about how well our design decisions supported the desired engagement and knowledge gained towards future designs.

The Project Team

The project was carried out in a group, consisting of three students at the Institute of Informatics at the University of Oslo.

Mihai-Cristian Patea has the technical background and education in technology

Borisa Barisa has education in healthcare

Masa Zivkovic has master graduated solo viola at the Academy of Music in Oslo

Our project also benefited from the engagement of the following four persons

Acknowledgments

Alma Leora Culén in the role of the client and internal project supervisor (also a course instructor). She has helped guide our methodological choices.

Espen Johansson in the role of technical advisor. His broad knowledge and skills with design tools, such as the laser cutter, were very helpful. He guided and tutored the team in the use of the Processing language and Flexi Design software.

Gaute Tønder, a recognized Norwegian composer, contributed to the project a piece of originally composed music that proved to be a strong tool in the awakening of emotions in exhibit visitors.

Katie Coughlin who got us the room for our installation at Sentralen.

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1.Introduction

The Creative Culture EU project "The People's Smart Sculpture" that focuses on participation in cultural and civic urban life in European cities was the context that our project was situated in. The project engages 11 partners in 8 European countries, artists and creatives from 29 countries with the aim to learn about technology as enabler of participation, as well as what it means to make collectively and what kind of communities of creative practices arise. Alma is the Norwegian partner on the project and she gave us a broad brief to work with. We were to try to use "The People's Smart Sculpture" objectives (described below) as our goals too, and see if we could create an innovative urban cultural project that promotes participation in cultural happenings in Oslo.

1.1 What is The People's Smart Sculpture (PS2) about?

The project is described as "PS2 is a unique combination of cultural, artistic and technological approaches that work on the design of new participatory strategies and digital tools in and for urban development" (PS2 Newsletter, March 2016). PS2 is offering a critique of old and inefficient practices on one hand, and proposes new solutions for the future of our European cities on the other.



1.2 PS2's objectives are to explore:

- Participative urban development (this was the most interesting point for us)
- New digital tools for participation
- Creative re-design methodologies
- Artistic approaches for new urbanity
- Cultural evolution of cities
- Co-creation and collaborative design in cultural projects
- Support of bottom up initiative
- European study on participation

During the first project meeting with Alma, we discussed the brief and understood that it is very broad and open. So was the choice of methods that we could use. We got homework for our next meeting. Our task was to read and think about the objectives of the People's

Smart Sculpture, become familiar with the methodologies that could fit and come back with at least 3 ideas each. Thus, we sat off to do this work. We call this Phase 1, but we could call it the utmost confusion or something along those lines.

2. Phase 1 (when we had no idea what we were doing, and did not know it should be like that)

The methodologies we were familiar with didn't make much sense in the project that we got. We could not use the user centered design as a methodology, as there was no specific user group, requirements, needs, not even the domain for design. So, we were unsure where to start. We tried reading on design thinking (Brown, 2009), in particular on how to ideate broadly. We learned thru this work that the messiness of the process is one of the main characteristics of design approach that we used. Avoid to take the first seemingly first idea was hard but worth it in the end.

Initial ideation was broad and many ideas were generated. Ideation methods were very different in the initial phase. Individual ideation required each of us to generate 3 to 4 ideas in support of divergent thinking at the start. These were generated by browsing internet and looking for cultural and political issues that resonated with us. By giving every idea between 1 and 5 points each, we selected 2 ideas to continue working with. Those were the Assimilation and Interactive Violin.

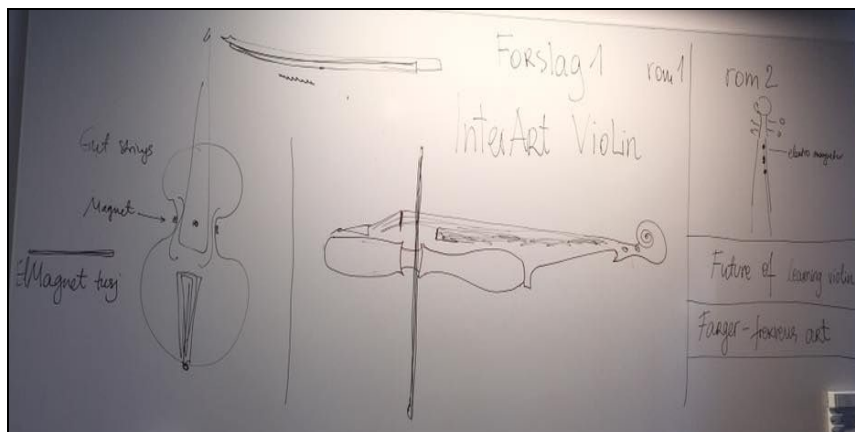


Figure 2: Interactive violin ideation process

The first idea on the board which was presented was Interactive Violin (see figure 2). It featured a learning mechanism that would enable anyone to play music without being afraid of making mistakes, but being encouraged to play on. Furthermore, people would be “rewarded” by being able to make a colorful display of the song that they played via “colored dust” being placed on the strings. Final result of voting for this idea: 4/5.

The second idea was Assimilation (see figure 3). The Assimilation idea involved the construction of either an application or of a webpage which would run a series of questions, but also involve reactions from people. This whole assembly would be placed in an airport in order for people to use and be “norweginezed”. This would involve, at least on a level,

We were provoked by Norwegian Immigration Minister, Sylvi Listhaug's statement that all who came to Norway must adapt to the current system in place and in most cases lose that which they have once known as their identity (The Independent, 2016). This is unfortunately mostly addressed to Muslims, in most cases, due to religious constraints and differences. Therefore assimilation of immigrants is the path they should go through in order to integrate into Norwegian society, according to First Norwegian Immigration Minister Sylvi Listhaug.

Facebook page of the First Norwegian Immigration Minister Sylvi Listhaug: "I mean those who come to Norway must adapt to our society. Here we eat pork, drink alcohol and show our face. One must abide by the values, laws and regulations that are in Norway when he arrives."

In contrast, the Norwegian King's opinion states that he does encourage cultural and religious diversity, calling out people to embrace "trust, solidarity and generosity".

The speech the Norwegian king gave in 2016: "My greatest hope for Norway," he said, "is that we will be able to take care of one another. That we will continue to build this country. That we will feel that we are – despite our differences – one people." (Guardian article, 2016).

The moodboard and opinions such as Listhaug's and King's really motivated us to raise some critical questions about immigration that are relevant for the time and the society we live in.

2.2 Scenarios

When we chose *Assimilation* as the theme for our project, we focused on coming up with a good context. Knowing that our installation will be at Sentralen, the newest culture house in the center of Oslo and that the installation will be for Norwegian users, we asked ourselves: "How can we address Assimilation issues with Norwegian audience which does not have the experience with assimilation? Could we provoke somehow emotional response to undesirable situations that immigrants face? Can we through technology simulate some of the experiences that would give our Norwegian audiences the possibility to think and experience immigration and assimilation?"

With these questions in mind we set out to make some speculative future scenarios. Scenarios are a frequently used method, especially at the start of design processes, and in particular when addressing future system design or design fiction (Rosson, M. & Carroll, J., 2009):

"Like other user-centered approaches, scenario-based design changes the focus of design work from defining system operations (i.e., functional specification) to describing how people will use a system to accomplish work tasks and other activities. However, unlike approaches that consider human behavior and experience through formal analysis and modeling of well-specified tasks, scenario-based design is a relatively lightweight method for envisioning future use possibilities. A user interaction scenario is a sketch of use. It is intended to vividly capture the essence of an interaction design, much as a two-dimensional, paper-and-pencil sketch captures the essence of a physical design." (Rosson, M. & Carroll, J., 2009)

Thus, we wrote several scenarios each in order to explore the subject of assimilation, researching "How would it feel to have to be assimilated into another society"? This method is widely used in critical design and speculative. At the joint meeting, we presented one scenario each (see figure 1).

<p>1) Picture representing 2016; ice melting 2) 2017 less ice, floods; 3) 2019 major migration, starved for resources; 4) 2022 water crisis, 50 degrees; 2025 contacted by aliens; 2030 2000 people departed; 2035 outside temperature rises more; 5) 2047: Hot temperature Water + superfood series of steps - video of rules Yes/No - DNA reading - info - blog - cleaning process/waiting room - voice giving information regarding time and seats left</p>	<p>Entrance: Pictures of 2017 - 2047 northern area being slowly sunk beneath the water; - Pointed to assimilation room Test of DNA compability - Entering see TV-list of rules, pictures of Earth at that time, decaying; - Encouraged by number of people already departed to new civilization; Pictures of new planet In 2040 proposal: Describing the rules: suit; adaptation; food; DNA Adaptation DNA Reader: Hand scanning Yes/No: Do something ecologically friendly Chip implementation (Passport, ID, behaviour tracker)</p>	<p>1) Pictures showing results of war and global WARMING War on water. Too much salt in the water. Living conditions: Extremely unfriendly 2) Notion of time pressure 3) Civilization shown. Just rumors of how good it is. Would you do it? 4) Conditions: - DNA test - identity loss - waiting in a camp - eating super food - chip</p>
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Scenario 1: Ice meltdown, global catastrophes

Scenario 2: Global instability

Scenario 3: War for food and water

Figure 5. Three scenarios that were the starting point for making a final, joint narrative.

We then proceeded to create a joint scenario from the three that would contain the most adequate and effective traits in accordance with abductive thinking. When we had the joint scenario we explored it by placing the scenario in past, present and future. After we decided that we all liked to place our scenario in the future context, that decision also pointed to the methodology that we could use effectively, the showroom paradigm of research through design methodology (Zimmerman and Forlizzi, 2014). Now we are in the position to present that scenario.

2.3 Final scenario

The year is 2047. The non-sustainable developments has led to Earth warming up to 50 degrees outside. Elon Musk has developed the rocket that can take people to another planet, Axzaylia, but obviously not entire population can go, so the governments are looking for technology that can enable them to select from their nations who can go. Violence, hunger, crime and violence has increased.

The technology should be based on DNA testing and all those who would be departed need to be tracked somehow.

3. Methodology

3.1 Choosing the right methodology

We looked up at the examples of similar projects, for example the project Lucid Peninsula (Dionisio et al., 2015). In that project, the authors also deal with dystopian future scenarios and they make an arty installation provoking visitors to reflect on what we do today to create such a future. We also got inspired by articles on critical and speculative design, see (Bardzell & Bardzell, 2015) (Dunne & Raby, 2013), (Bardzell and Bardzell, 2013) and (Auger, 2013). As mentioned above the showroom paradigm was quickly seen as the most appropriate for our work. We now describe briefly Research through Design methodology and, in particular, the showroom with its critical and speculative design opportunities.

3.2 RtD Research through Design

The methodological approach that allowed us to research emigration in the context of our scenario, through critical and speculative design, was Research through Design. Zimmerman and Forlizzi (Zimmerman and Forlizzi, 2014) describe the evolution of RtD and frame three different RtD influential design research practices: the Lab, The Field and The Showroom. The Lab practice combines design with experimental evaluation, The Field practice utilizes the user centered and/or Scandinavian participatory design perspective and The Showroom practice builds on speculative and critical artifacts that challenge the current situation.

We also used *Reflective Design* paper by Sengers et al. (Sengers et al, 2005) who speaks of mobilizing critical approaches to uncover unconsciously embedded cultural assumptions and to combine this with the design of socially responsible systems. The authors formulated a set of principles and design strategies to guide designers in rethinking their own practices, some of which were strongly related to critical design, such as ‘designers should use reflection to re-understand their own role in the technology design process’.

For us, we wanted the project to create a possibility of promoting in our audiences higher awareness about the political situation concerning immigration, emigration and assimilation. The project could not take all these at once, so we focused on the following question: “How can we design something that will provide an emotional impact, allowing the visitor to our showroom to experience simulated emigration situation to another planet, as per our final scenario?” In attempting to start, we considered the following:

“In RtD that follows a critical design approach (Dunne & Raby, 2001), design researchers make provocative artifacts that force people to think, to notice, and to reconsider some aspect of the world. The term “critical design” was first used by Tony Dunne to describe a philosophy about design that refutes the status quo

(Dunne, 1999). However, the idea of designs that critique the current state of the world is much older and can be found in many design and art movements such as in the work of the Pre-Raphaelites or the Memphis Design Group. The approach emphasizes that design has other objectives than to help people and to improve the world.” (Zimmerman and Forlizzi, 2014)

Such research approach draws from historical design practice. The research, according to Zimmerman and Forlizzi, involves a process of problem selection, exploration through the generation of many possible forms, and iterative refinement of a final form that approaches showroom quality. The knowledge gained through the process emerges as the design team engages in reflection on the process, the designed artifact, and the intended effect on the audience.

3.3 Novelty of the project

We believe that our idea for the project is novel. The methodology is also recent, and it surely was novel for us.

3.4 Universal design

The scenario that we developed indicates that people who are old, have some disease or have disabilities would not be likely to get a spot on a space shuttle. If a user doesn't have a finger (the finger is needed for DNA scanning), is blind he is automatically rejected by our system. This is kind of a system that provokes the Universal design principles, just like FrP and Listhaug provoke many of us. This is made on purpose, just to reflect on how rigorous their politic is.

4. Phase 2: Designing the Showroom (we know what we want, and how to get there)

4.1. Concept development

After working with some sketching and flowcharting, as shown below on Figures 6 and 11, we developed the following concept for the showroom: before entering the room, visitors can see dystopian images of the situation on Earth. A robotic voice was inviting them to the room where one can apply for emigration to Axzaylia. This prepares visitors to act on our scenario. Upon entering the installation room, a large screen with video informs the visitors of the conditions on Axzaylia, its civilization, culture and rules. One must see this video before proceeding to the DNA scanner that reads each person's DNA and determines whether a user can be assimilated or not. Depending on the user's answer to either accept having a chip implanted with the emigration documents and shuttle ticket in the index finger, or using the given tasks that can improve his DNA. This increases their chances of success next time they use the DNA reader since they can try again after doing something environmentally friendly on Earth. The user which now has the chip "implanted" into his index finger can

proceed to the waiting area where he can write a farewell message to Earth. One can also get synthetic water and food there. They can also see how special environmental protective suit which will be used on the planet in order to adapt to the atmosphere and conditions looks like (silver burqa). The door leading to the departure area has a projector directed to it with a video of a shuttle ready for take off. A specially composed music for this installation was playing.

The concept was presented to Alma at the supervision meeting. We all agreed that this is desirable and also feasible in the time we have. The context that we imagined at the beginning involving assimilation (assimilation starting at the airport, upon immigrants arrival) would not have been possible to do well in Sentralen as a venue. In Sentralen, there are children, and on the date when we could organize the exhibit there, there also was a Halloween workshop with pumpkin carvings. It was unanimously agreed that this concept fits much better for the venue, and the dates, too.

4.2 Sketching

As earlier with scenarios, we used individual sketching and synthesis of sketches when we designed the pedestal for DNA system. See Figure 6:

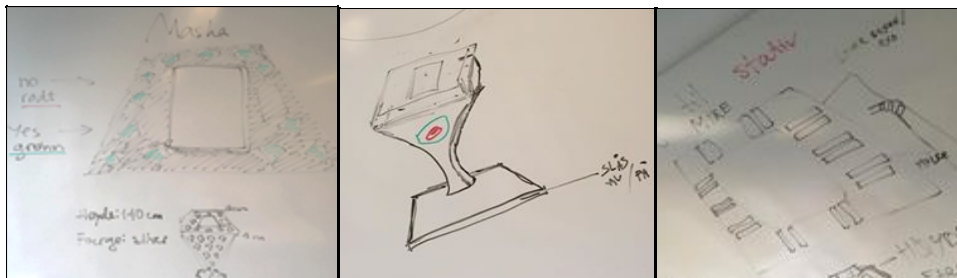


Figure 6: The three versions of the pedestal and tablet stands

4.3 Learning to laser cut

After being instructed by Espen in the way of using Flexi Design, we took the chance of starting to design a pattern which we could laser cut later on. The whole process of laser cutting though was way more arduous due to the fact that the process was long and tedious, very often it was repetitive and, above all, it needed supervising due to issues with it overheating after a certain amount of usage. Espen's help here was invaluable.

4.4 Prototyping of app

We prototyped the touch platform in a similar manner. Designing graphical versions of all the pages, putting them into a flow chart. We tested the diagram before implementation by giving it to random users and writing down their response.

Technical testing of the interface was performed on 5 random users from different age groups. We found that the circles that shows where to put the fingertips were not big enough. So, we improved that before installation. Also, the font was not readable for all of

our users, therefore we improved that as well but changing it to a bigger and more readable font. Here is the videos of testing: [\(Borisa Ba, 2016\)](#).

We drew everything we wanted to be displayed to the user by hand first, made a flowchart and then put it in a digital graphical version pictures using Photoshop. Later we used these pictures in our program and manipulated them with help of Processing language. We got help from Espen for writing the code in Processing language.

The help we got from him was about gaining knowledge about how to manipulate pictures and direct the program to execute methods according to user's input. See figure 9 and 10.

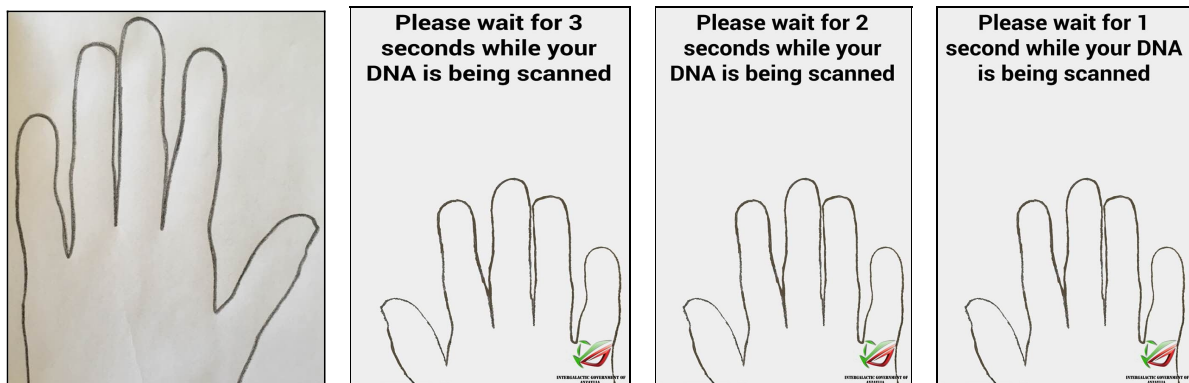


Figure 9 : Evolving of DNA scanner pages

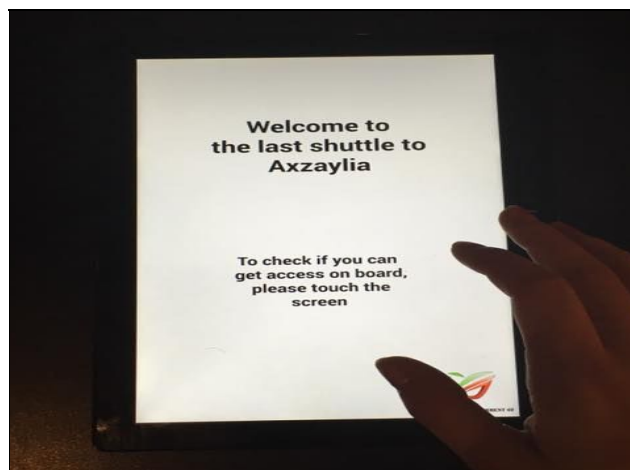


Figure 10 : End version of app home screen

4.5 Flowchart

Figure 11 shows our newly improved flow chart, including the current steps which the users will take in order to progress through the application and the two possible outcomes, slightly better portrayed.

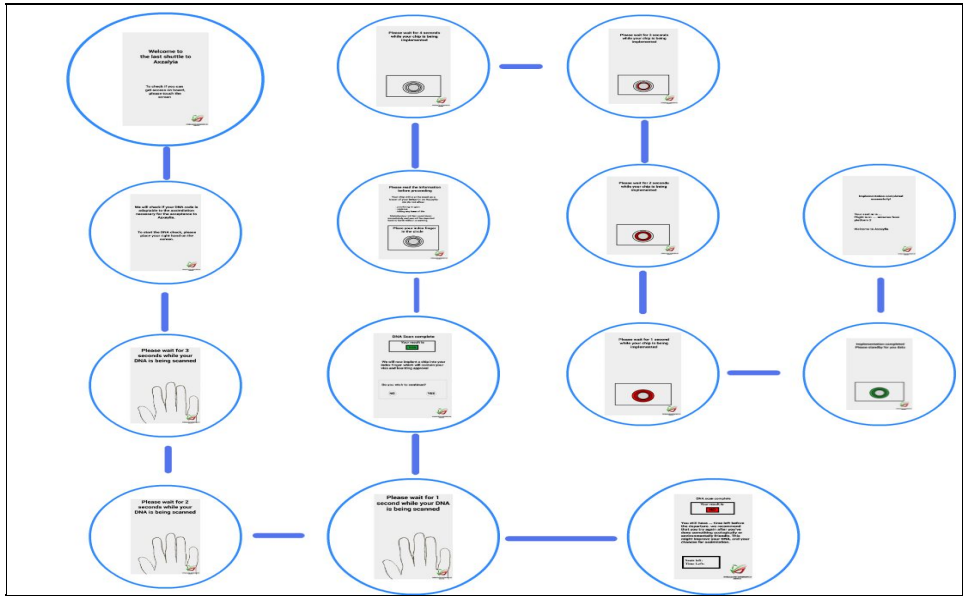


Figure 11: Application flowchart - every step and scenario

4.6 Back to hands on fixing the stand and tablet

We were testing the materials we needed for the box around the DNA reader system. So we did some pilot laser cutting in wood, and tested it with paper and lights coming from an Arduino LED circuit. We decided that this would be appropriate if we in addition to this paint the wood in a futuristic - silver colour. See figure 12.

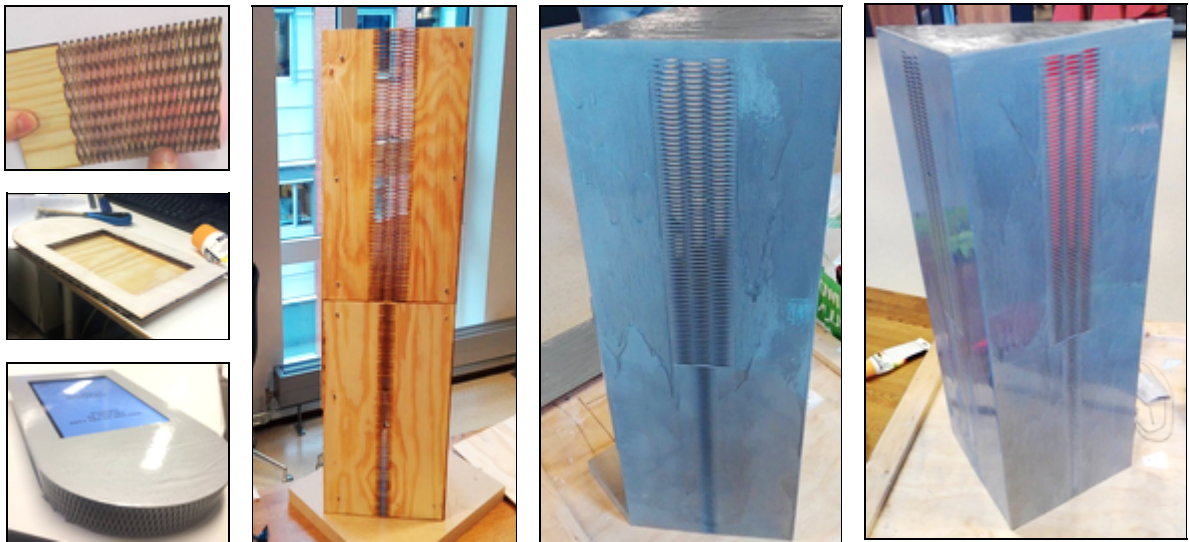


Figure 12 : The evolution of the DNA scanner prototype

4.7 Making a video



Concept of the video was showing visually what had happened to the planet and why it is impossible to stay on Earth. We presented it by using some strong imagery to provoke disturbing feelings while watching it. The first part of video contained images of global warming, strong winds and cities lying under water.

The second part was giving visual expression of the new planet: impressive cities at one side, and the immigration camps on the other, and thus making clear indication on contrast of living conditions between immigrants on the new planet and the natives. See figure 13.

Figure 13 : Video in a assimilation room; (Link to the video: : [\(Mike Chris, 2016\)](#))

4.8 Burqa

The idea with the burqa was to make users feel uncomfortable, provoke them a little bit and keep humor as an important part of speculative design. We represented it as an outfit necessary for immigrants in immigration camps, since it would help them to adjust to the new environment, but also giving it the proper title of “Environmental protective suit”. In the same time we were hoping that this would help them sympathise with real immigrants who are wearing burqas. See figure 14.



Figure 14 : Burqa

4.9 What to do: yes/no go



Figure 15 : Messages from those who got accepted

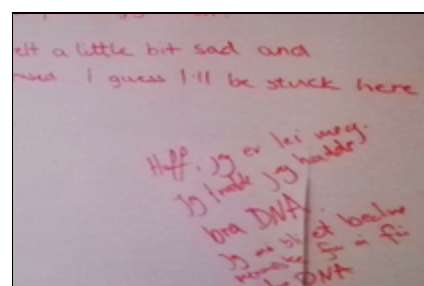


Figure 16 : Messages from those who got declined

If user got “Yes” as an answer, he/she could write a farewell message to Earth on a paper wall (see figure 15) and reflect over the feeling of leaving it for ever.

We planned that if the user gets “No” as an answer that he would be able to “improve” their DNA by doing something ecologically or environmentally friendly. We wanted to give them freedom to choose what that could be and asked to come back and try again after they “improved” it. This would be used as a method to gain creativity in developing sense for good environmental and social behavior. They could write on a paper wall (see figure 16) what is it that they would do to improve their DNA code.

“YES” and “NO” wall was originally planned to be placed in waiting room - separate area, but we had to adjust and fit this part of the design into showroom due to limited space we were offered.

4.10 Posters & Flyers

Our poster (see figure 17) is showing DNA strand in the background inspired by our main interactive object DNA scanner. The idea for the name of the installation came from thinking



about change as a natural and positive thing, opposed to unnatural changes which happens too fast, rapidly and are purely caused by human factors.

Thus, both climate changes and forced changing of dna and personality could stand under the umbrella term “rapid change”.

Figure 17 : Poster for installation

4.11 Shuttle poster



The point with shuttle poste (see figure 18) was to visualise what is the next step for user after getting the chip implemented and saying farewell to Earth. We tried with this to create the “feeling of being close to the last departure”.

Figure 18 : Poster representing last shuttle to Axzaylia

4.12 Pre-entrance photos showing the state of Earth



Figure 19 : Chronologically arranged photos of natural disasters which were displayed in the entrance hall

4.13 Music

Since we knew that we will exhibiting the project for the audience in a public space, we thought that it would be good to use music as a background that would lift the room's atmosphere. Besides wanting to awaken emotions within the user, we also used music and voice in the background in the entrance area to direct users in the direction of the assimilation room. The *"Please proceed to the emigration room"* robotic voice repeated every minute was aimed at making the audience to feel a bit more anxious while waiting.

In summary, the showroom had elements outside preparing the visitor, video, music, DNA testing, burqa man and poster that together worked to make our scenario believable and set the stage for emotional response.

5. The speculative installation Emigrate to Axzaylia



We planned where the audience will start their experience, how they will proceed to the assimilation room and in which order they will experience the installation. We used the previously written scenario to plan this, but we also added some new features that would help the user to understand the flow in the installation. Futuristic music in the background and a voice that says *"Please proceed to the emigration room"* every second minute helped audience orientate in the installation area.

Figure 20 : Entrance to assimilation room with thermometer showing 50 C

It was important to find the right spot for the system. We used the corner opposite from the entrance to the assimilation room as a right spot. Since they would have see the video first, it was also natural to place it to the left from the screen. See figure 21.

Next to the system, again on it's left we placed two big wallpapers where they could write their comments and reactions in case of getting no or yes as an answer (see figure 15 and 16). These were separated by the wall. Next to them again was human mannequin with a burka on it, representing the futuristic burka users were supposed to have in immigration camp on Axzaylia (see figure 14).

At the end of the installation, next to exit from assimilation room we placed a big poster of space shuttle ready for take off. We carefully picked the picture that didn't have any vegetation in it and a shuttle without any logos on it. It was rather dark picture, since we knew that the exhibition will be taking place in late afternoon - we tried to make it as realistic as possible by using the same daylight as in reality (see figure 18).



Figure 21: DNA scanner on invitation to our installation

We have invited some politicians to our installation, since they could directly impact broader masses in case they get moved by the project. We wanted to avoid a Trump scenario in Norway, where people are voting for parties which work in favor of majority of people, but neglect minorities and immigrants. Beside that we hope that people would be generally be more aware of climate change and global impact it might have on war for water, starvation, natural disasters and migration.

6. Findings

6.1 Installation and qualitative data

We organized the installation in Sentralen, Oslo the 10/28/2016. We had 30 visitors. Installation lasted for 4 hours. There were few visitors, perhaps in part because it was a day before Halloween).

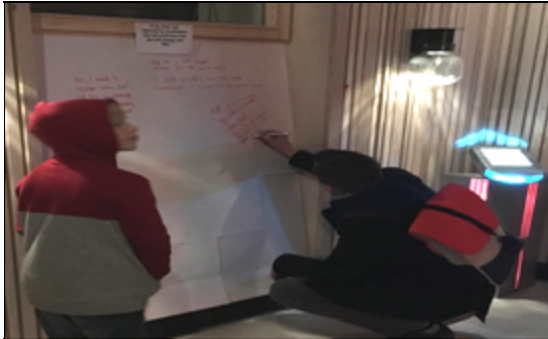


Figure 22 : Feedback from those who got "no" as an answer

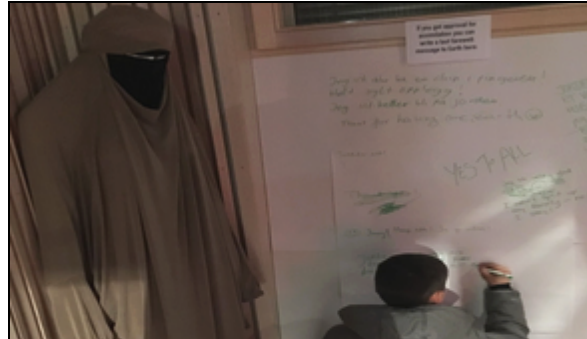


Figure 23: Feedback from those who got "yes" as an answer

6.2 Data gathered from the installation

Feedback from those who received no as an answer

"I got depressed".

"I thought I had a good DNA, I think I should have been accepted"

"I'm disappointed. I'm going to plant a tree to improve my DNA."

"I'm sad. I will help someone out there who needs help. Maybe it gives me a better DNA".

Feedback from those who received the yes response:

"Thanks Earth"

"Earth is my friend, but I must go now"

"I will miss you the earth"

"Farewell suckers"

Dialogues

- "Mom, is this really going to happen?" a girl asked her mother while they were watching images of natural disasters in the possible future.



Figure 24 : Family in dialog while watching the video

- "Damn, I did not get YES as an answer" a young man said to his friend. "I have to try again."

- "I can not believe I voted for the Progress Party! They do this for immigrants!"

- "I'd rather die on Earth than to have a chip implanted and use a burqa" another young man said.
- "I do not think anybody really wants to wear the burqa!"
- "I believe that this is possible scenario."
- "I hope this will not happen, but I see that it is possible."
- "So good that you use technology to get us to think more about things like that!"
- "This is very persuasive" - Swiss artist (Sylvie Fleury)

General feedback

"Cool system". "Easy to use". "Well presented, very convincing. In the right direction. Cool video." "Great music.". "It's very good that you are using technology to make us think about this matter!"

Emotional response

When rejected, a woman began crying. Kids got worried about their sibling who was rejected. They do not want to split their family.

6.3 Qualitative analysis

The goal of the analysis is to determine how users experienced the showroom and what kind of responses it provoked. How believable they think that this concept is? Has this installation affected their mindset in relation to emigration and assimilation of immigrants? Viewing the comparison with today's migration politics in Norway and Europe?

With this as our goal, we have chosen qualitative method using formal observation during installation time.



A non-participatory observation was chosen, but some of researches were available in the room in case that audience had any questions or problems with using the DNA analysis screen or wanted more explanations or information on Axzalya. When visitors left the room, we asked them about their impressions. In addition, we could analyze what they wrote on the wall when they found out whether they were allowed to emigrate or not (Section 4.9)

6.4 Analysis of findings



Reactions (Emotional response)

In accordance to our research question we focused on capturing emotional responses and verbal feedback, as well as behavior. We made a mutual subjective analysis of our findings, since we wanted

to answer our research question which focused on emotional response, we have concentrated on data that had to do with the aforementioned emotional response. The spectrum of emotions in users was very large: from sad to happy. When rejected, a woman began crying. Kids got worried about their sibling who was rejected. They do not want to split their family.

On the other hand, some were apathetic, pessimistic and skeptical. But to the end, most of them showed empathy towards immigrants and a few of them criticized the Norwegian immigration policy.

The most important and exciting part of the analysis was diversity in emotional response to the operation of the system.

7 Conclusion

So far we can conclude that the system had an emotional impact on users and that there is no general answer to our research question. The only thing that we can generalise is that empathy with immigrants was achieved, and that reflection over political situation was awakened. Usually in speculative design one gets more questions than answers. The new question that arose from our research was :”What happens in a given scenario if the family gets split?”

The restriction we got considering the installation’s location resulted in poor perception of pictures representing global natural disasters. Also, the audience we knew we were going to have (mostly children due to Halloween project next to our showroom) restricted us in a sense of giving most realistic picture (we didn’t wanted children to get too scared). Initially we also planned to have a separate room - a “Waiting room” where the audience can “wait” for the last departure, try synthetic futuristic water and food from Axzalya, watching a video loop of the Space Shuttle, with futuristic music in the background. This space was meant to be used as a room where they can reflect over the issue of leaving Earth and write their farewell messages. We hope to remedy the weakness of our installation and have the chance to exhibit it again in May 2017.

8 References:

- Auger, J. (2013). Speculative design: crafting the speculation. *Digital Creativity*, 24(1), 11–35.
- Bardzell, J., & Bardzell, S. (2015). *Humanistic HCI*. Morgan & Claypool.
- Brown, T. (2009). *Change by design: how design thinking can transform organizations and inspire innovation*. New York, NY: HarperCollins Publishers.
- Dunne, A. & Raby, F. (2013). *Speculative Everything: Design, Fiction, and Social Dreaming* (1st edition). Cambridge, Massachusetts ; London: The MIT Press. M. Rosson, and J. Carroll. *Human-computer interaction: Development process (2009)*
- Bardzell, J., Bardzell, S., 2013. What is “Critical” About Critical Design?, in: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, CHI '13. ACM, New York, NY, USA, pp. 3297–3306. doi:10.1145/2470654.2466451

Borisa Ba, 2016. teknisk testing 4.

Dionisio, M., Bala, P., Trindade, R., Nisi, V., Hanna, J., Up, T. 's, 2015. Lucid Peninsula: DreamScope – An Interactive Physical Installation, in: Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition, C&C '15. ACM, New York, NY, USA, pp. 377–378. doi:10.1145/2757226.2757382

King of Norway reigns on Facebook after diversity speech | World news | The Guardian [WWW Document], 2016, URL <https://www.theguardian.com/world/2016/sep/06/king-harald-norway-diversity-speech> (accessed 11.29.16).

Mike Chris, 2016. Video from installation.

Minister tells Muslim refugees “we eat pork and drink alcohol”, is told to quit [WWW Document], 2016. . The Independent. URL <http://www.independent.co.uk/news/world/europe/norway-integration-minister-muslim-eat-pork-drink-alcohol-show-face-sylvi-listhaug-a7372991.html> (accessed 11.29.16).

Sengers, P., Boehner, K., David, S., Kaye, J. “Jofish,” 2005. Reflective Design, in: Proceedings of the 4th Decennial Conference on Critical Computing: Between Sense and Sensibility, CC '05. ACM, New York, NY, USA, pp. 49–58.

Zimmerman, J., Forlizzi, J., 2014. Research Through Design in HCI, in: Olson, J.S., Kellogg, W.A. (Eds.), Ways of Knowing in HCI. Springer New York, pp. 167–189.