



MEANDER VAN DER WEIJST
PORTFOLIO 2023

CONTEXT

This portfolio showcases some of the projects I worked on during the master Industrial Design at the University of Technology Eindhoven. I started the master in September 2020. The work presented here dates from the second semester of the master at the start of 2021 until graduation in the summer of 2023.

At the start of this period everyday life was still very much affected by Covid measures and restrictions, by the end, we almost collectively seem to have chosen to forget it ever happened. The influence of Covid restrictions on the work presented here is clear to see in the first project (ElimiWaste).

On a personal level, I think the Covid restrictions awakened a great urge in me to expand my horizons, to travel. Once the measures were lifted that is what I did, a lot. I spend two

semesters during the master working on projects abroad. First, I went to Lisbon for the spring semester of 2022, and a year later I went to Barcelona to work on my graduation project in the spring of 2023.

Apart from travelling, my free time in the period of these works was mainly dominated by reading and writing, aside from the occasional upholstery or sewing project, I didn't spend as much time DIY-ing compared to previous years. In the master I focussed most of my efforts on courses in philosophy. This may have resulted in a less densely packed portfolio than that of 2020, nonetheless, all of it, contributed to my growth as a designer.





Let's get uncomfortable

PROVOKING DESIGN

I enjoy challenging people, provoking them, poking and prodding into their belief systems through critical design. Where most design focusses on making people more comfortable, I want to do the opposite. Because as P.T. Barnum put it: "Comfort is the enemy of progress." And the progress I seek to attribute to is towards a more equal and just society.

We live in a society that has convinced itself that through hard work anyone can accomplish pretty much anything, meaning the winners must be deserving of their vacation homes, sports cars, and bonuses larger than my student debts, and those who fail to get ahead have no-one but themselves to blame. Not only is the idea of a perfect meritocracy unobtainable, one can also ask themselves the question whether my (in)ability to work hard or my (lack of) talents, are truly my own doing?

When we start questioning free will, we can start questioning all institutions built from it, like discrimination, inequality, privilege, social mobility, homelessness, punitive action, etc. etc.

Throughout my master this vision guided my educational development. I worked on multiple speculative or critical design projects. I collaborated with professionals to create exhibition pieces. And I pursued the Philosophy and Ethics of Technology certificate.

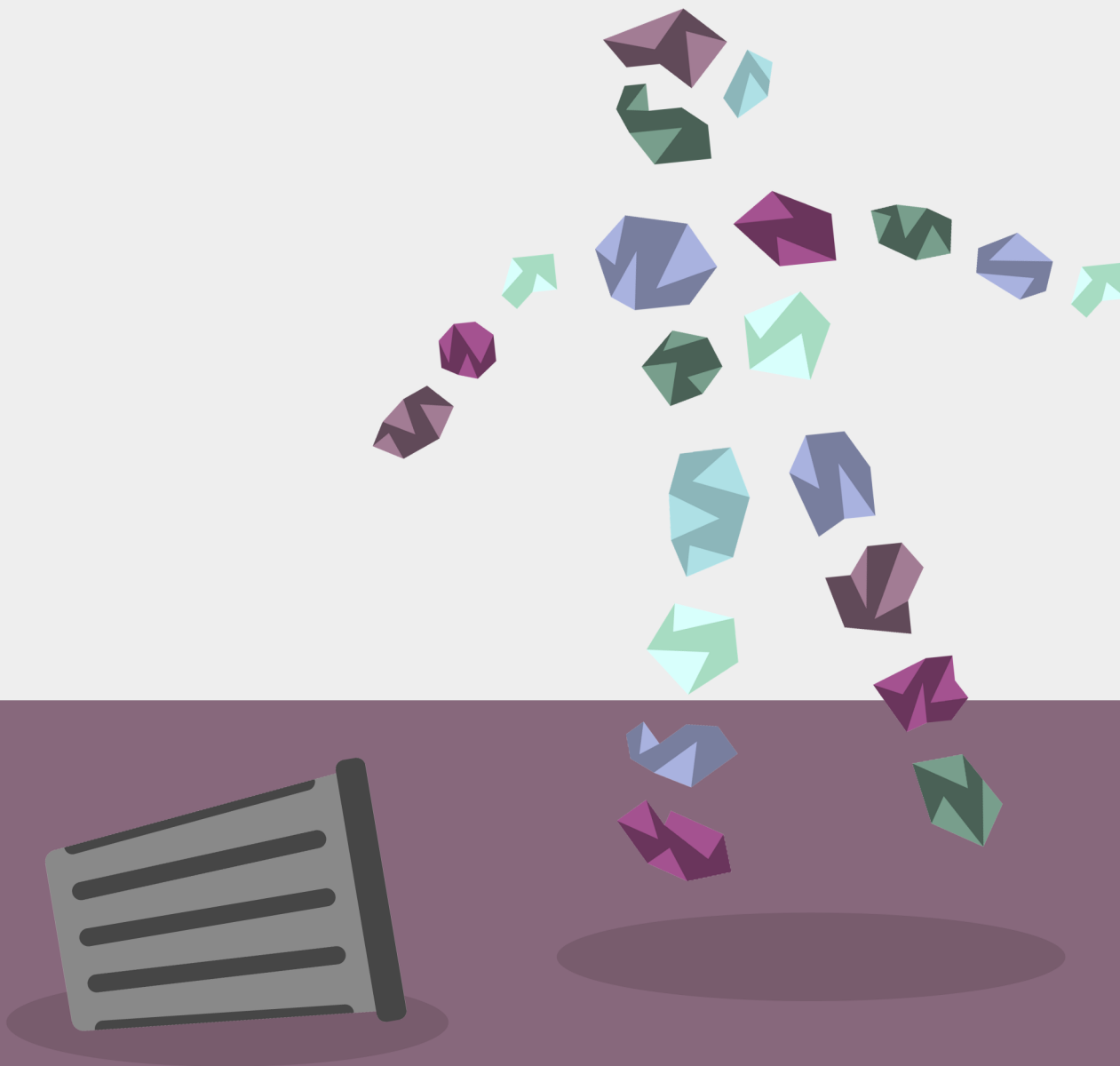
Making online data collection tangible

ELIMIWASTE

Imagine this: you're browsing the web looking for a birthday present for your friend and you stumble upon a website with the perfect gift. A cookie notification pops up. What do you do? There is no reject all button and you're kind of in a hurry. You quickly decide to accept and buy the present. Sounds familiar?

In this project I researched online privacy. Using speculative design, I set out the answer the question: When presented with two scenarios in which similar data is collected both digitally and in a tangible manner, are people consistent in their privacy preferences?

The speculative design I created is a fictional waste disposal company called ElimiWaste. This company gathers personal information from people's waste. By selling this data, they can



make waste collection and disposal free for everyone. I presented this design fiction in three videos, two videos were used in an online survey. The last one was posted on social media to engage people in a discussion in the comment section to gather qualitative responses. The choice to present the speculative design online was made because it well fit the topic and because of Covid restrictions at the time.

ELIMIWASTE PROMO

The first video shown in the survey is a promotional video about the company. This video is 'made' by ElimiWaste to introduce their service to all Dutch citizens. The video contains animations and stock videos narrated with a voice over.





NEWS ITEM PROTEST

Het Verhaal Regionaal (the regional story), a local news station, presents the second video in which they cover a protest that took place outside ElimiWaste headquarters. In this news item a reporter interviews the initiator of the protest, Talitha Hoogpand. Talitha explains how ElimiWaste violates their right to privacy.

TECH TODAY VIDEO

The last video is made by Tech Today, a YouTube channel that discusses the latest news in tech. The presenter in the video starts by introducing ElimiWaste as the Dutch waste disposal company that has been making headlines worldwide. This is followed by a shortened version of the promo video and an interview with the organiser of the protests. The video is concluded by the presenter asking the viewer how they feel about this company.





Decentralized autonomous community garden

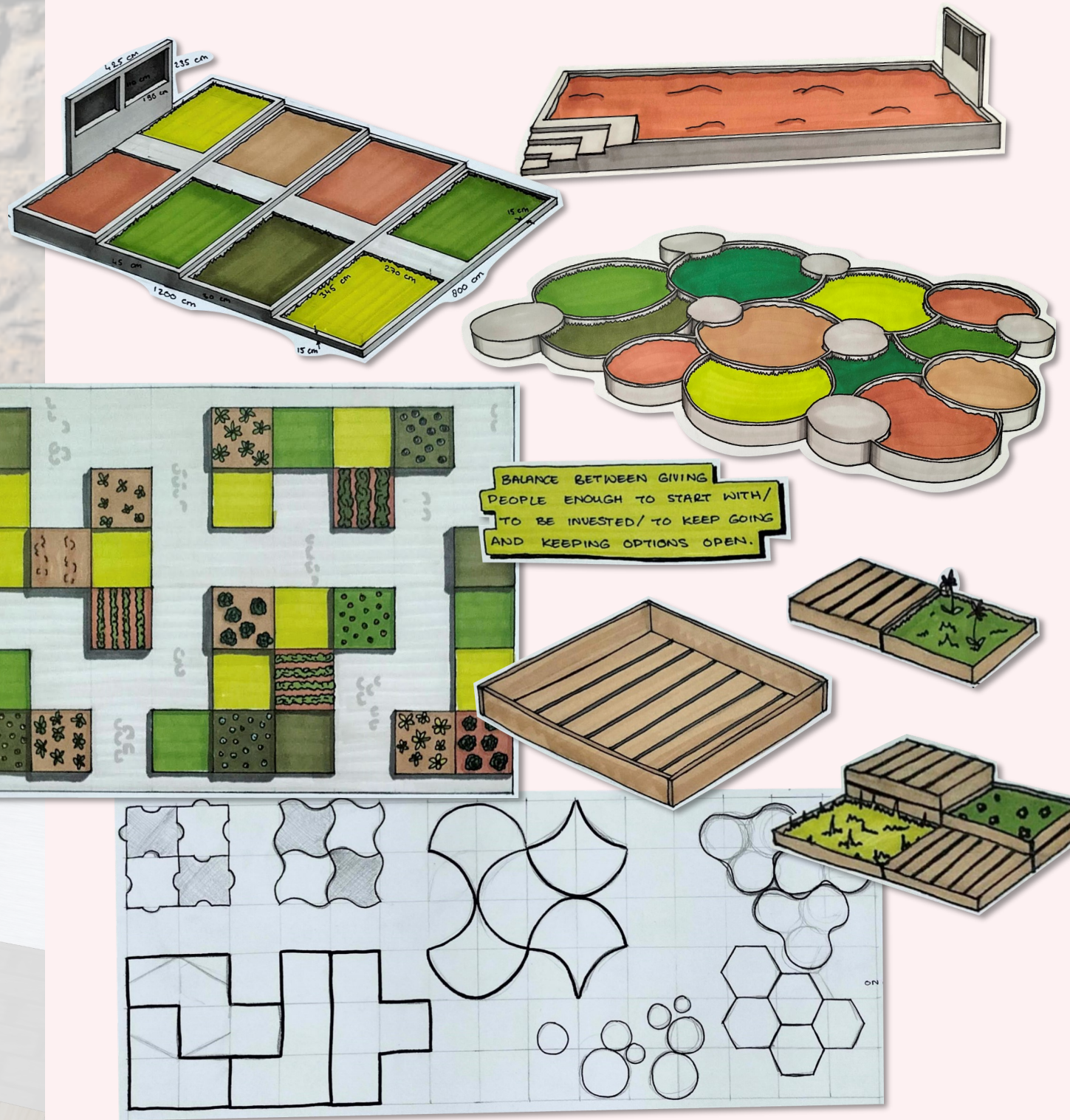
THE PIXEL GARDEN

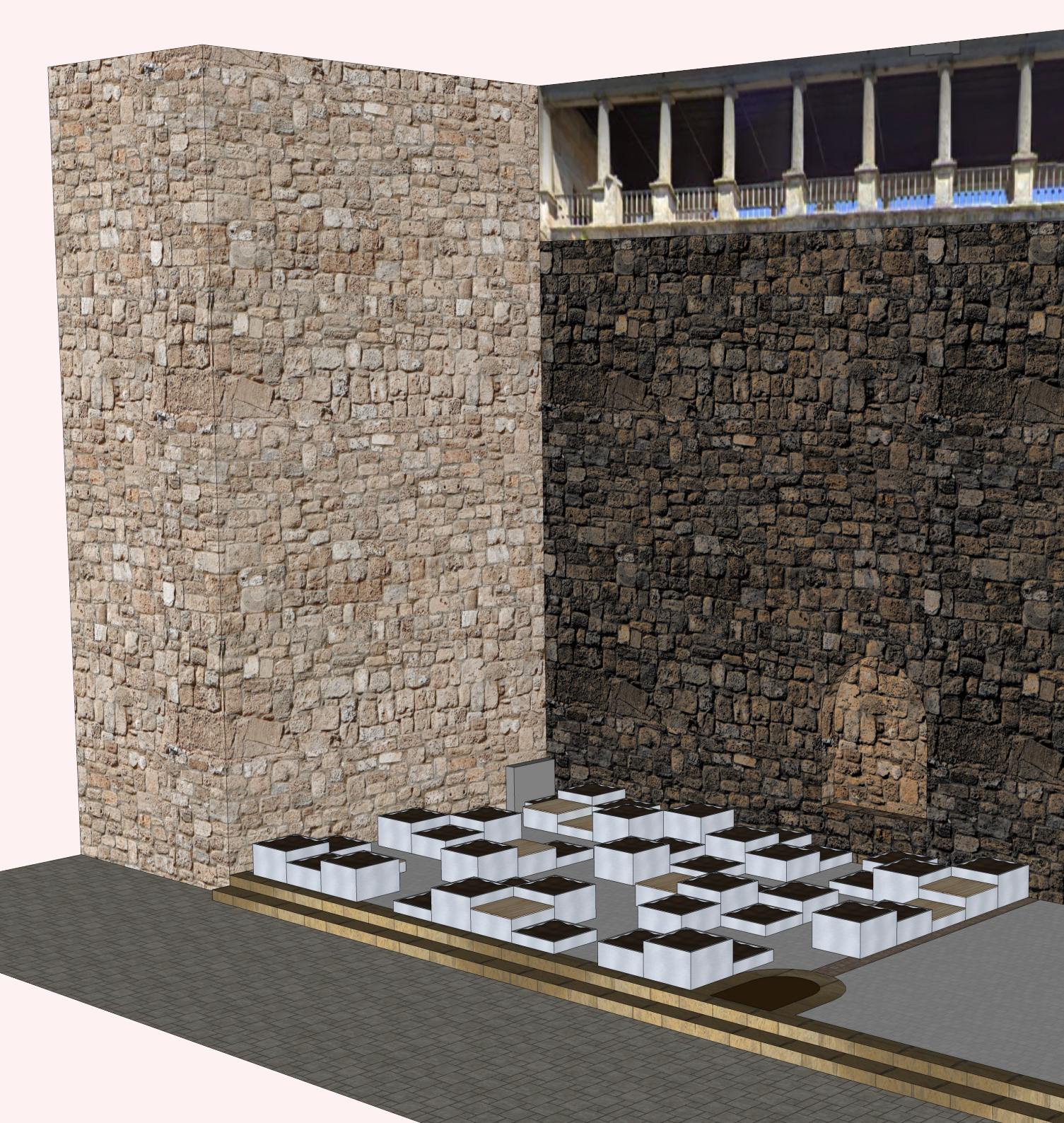
In this project I explored the possibility of running a community garden as a decentralized autonomous organization. This project was executed within the Human Computer Interaction faculty at the Interactive Technologies Institute (ITI) in Lisbon, Portugal. This proposed model was created for *Jardins Efemeros*, an art festival in Viseu, Portugal. The proposed Pixel Garden was created to run on a historic site as an experiment for one year. The available plot measured 8 by 12 meters. Unfortunately, building a physical garden was no longer in the budget and the Pixel Garden remained a proposal.

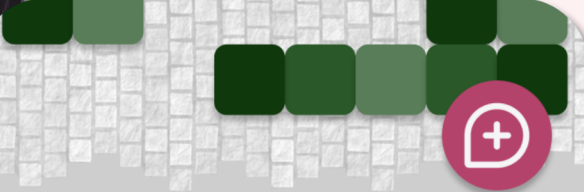
The first ideation steps were determined mostly by the goal of designing the garden in such a way that does not impose a purpose on its


users, after all, the goal of the DAO is for the people to decide what the garden should be. To make sure all possible purposes were kept in mind while designing a list of what those purposes could be was made. This list includes local meetup/hang out space, collaboration space, facilitate performance (speakers, music, theatre), flower garden (stimulate biodiversity), vegetable garden, and education about plants.

Eventually, to make the garden as modular as possible, the decision was made to make up the garden with square containers called Pixels. The Pixels come in three sizes that can be moved. By covering the Pixels with a wooden cover, they can be used as benches or stages, the or as containers to store equipment.









GREEN_TUMB_THOMAS
25/05/22 - 11:19

We need trash cans!

To keep our garden free from litter, I think it would help if we buy a trash can. Very often when I pass by the garden there is some waste laying around. The nearest waste bin is across the square so it'll probably help to have one at side of the garden.

What do you think of this one: <https://www.manutan.pt/pt/map/caixote-de-lixo-em-metal-e-madeira-40-l-a023694?>

15


37

62

YES

NO

SHOW REACTIONS



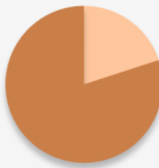
ANNALIA
19/05/22 - 18:56

Beehive in the garden

Everybody knows the bees need all the help they can get, which is why I propose to place a beehive in the garden. We can even get money from them.


80% NO (45 members)
20% YES (11 members)

You voted YES








56 members voted
Closed 20 minutes ago

SHOW REACTIONS



WEEDING_JOE
23/05/22 - 18:43



DAO PLATFORM

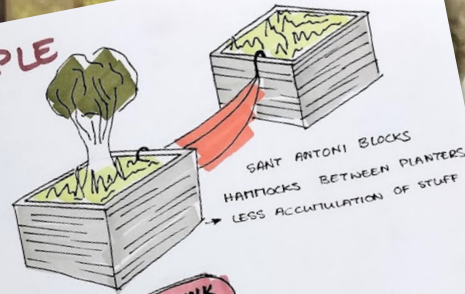
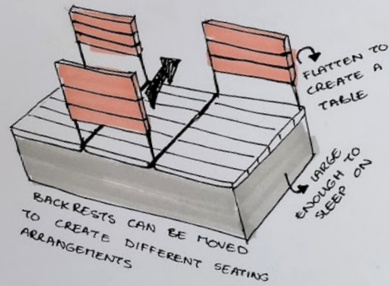
The community garden is governed by the DAO through a website and a smartphone application. To display what the platform could look like, two UI mock ups were made in Figma.

The website and application serve different purposes. The website will be the main medium used for the governing of the DAO; creating proposals, and reviewing the DAO's budget is something that requires people to take a moment and really sit down for. The application is mainly used on location, to collect data about the current state of each Pixel, with which new directions can be decided on. Both the website and the application allow members of the DAO to check news updates, proposals and voting results.



ACCEPTANCE OF HOMELESS PEOPLE IN PUBLIC SPACES

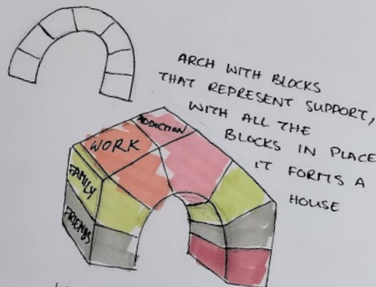
- PROMOTE CO-EXISTENCE
- PROMOTE INTERACTIONS



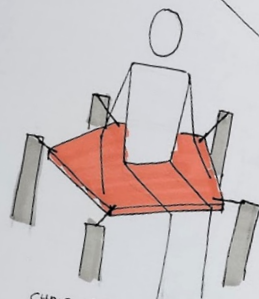
RAISE AWARENESS OF HOSTILE ARCHITECTURE

INCREASING EMPATHY

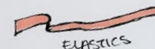
- UNDERSTANDING OF HOW PEOPLE END UP ON THE STREET
- MAKE PEOPLE SEE FRAGILITY OF THEIR SITUATION



→ ALREADY FALLS APART WITH ONE MISSING BLOCK



SIMULATE FRAGILITY/INSTABILITY THROUGH MATERIAL



Provoking empathy towards people experiencing homelessness

HANGING BY A THREAD

For my final master project I went to Barcelona, Spain, to work on a project about homelessness and hostile architecture. This project was executed in collaboration with aquí, an urban design studio based in Barcelona.

During this project I drew inspiration from multiple sources: literature, volunteering, interviews, a survey, and Barcelona's street art. During the ideation phase, I explored three possible design directions:

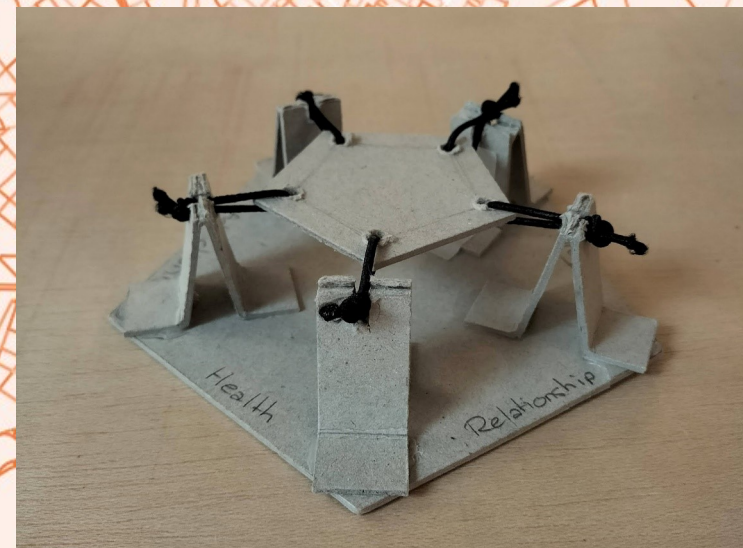
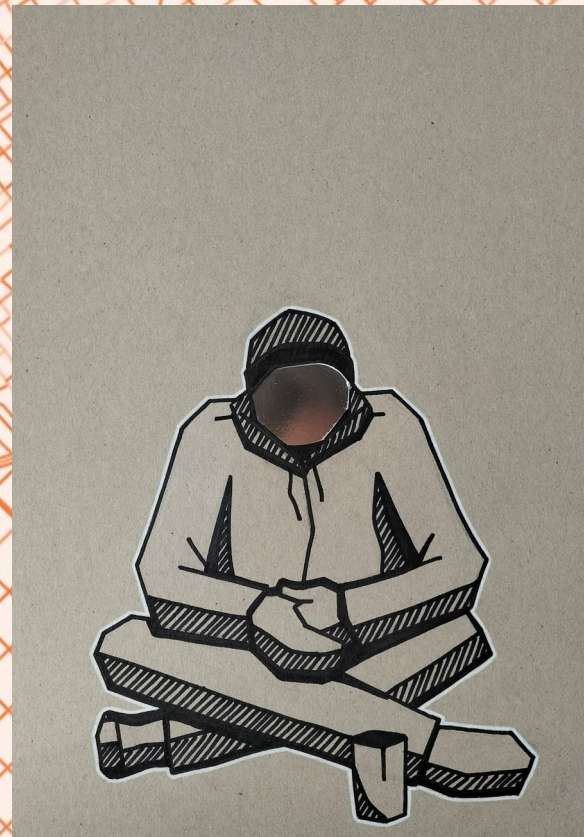
- Increasing acceptance of people experiencing homelessness in public spaces
- Raising awareness of hostile architecture and the people affected by it
- Promoting empathy towards people experiencing homelessness

After the ideation phase I continued working on two concepts. I worked on a social media and

street art campaign to raise awareness of hostile architecture, called *Espinas de Barcelona*, as a side project. And the main focus of the project was to create a chair suspended from five points that represent various supports in our lives. These supports can be unhooked to simulate what it is like to lose them. As long as we don't lose multiple supports at the same time, we're okay, the remaining threads will carry us. However, when we lose multiple supports simultaneously, we fall.

This tangible experience both informs people on how others end up on the street and encourages them to reflect on their perspectives and prejudices about people experiencing homelessness.

The initial idea of a chair suspended by five surrounding posts was later changed to swing for feasibility in terms of material, costs, size, and realization.



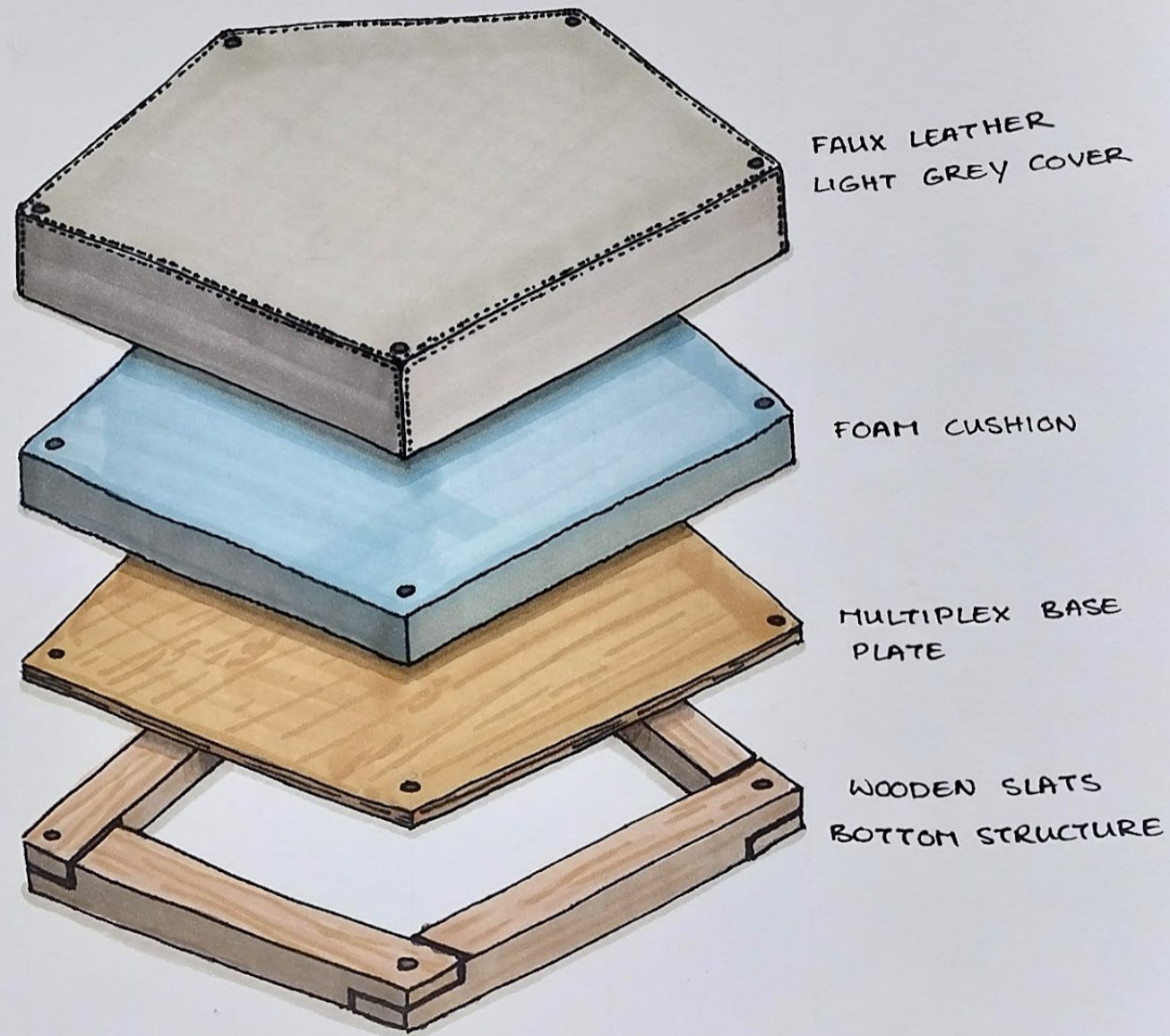


REALIZATION

To determine what the five supports would be, I searched for either European or Spanish studies on the causes of homelessness. From these studies I decided on the following five supports: health, relationship, housing, employment, and family. I chose these categories, which relate to relational, structural, and personal factors because for all specific trigger moments can be imagined. This works well with the abruptness of the unbuckling of the threads of the swing.

I used quick release buckles typically used for sailing for the swing. By pulling the keychain ring attached to a spring loaded pin, the clasp opens.

The intention was for the seat to be representative of a home. I wanted it for it to be comfortable, neatly finished and to be reminiscent of furniture found inside the house, hence the foam cushioning and the light grey leather cover.





VALIDATION

To validate the effect of the swing, ten people were interviewed. Many of the participants remarked the swing to be comfortable and fun, and felt the unhooking of the threads to be quite shocking.

Five participants expressed how the experience of the swing made them think of homelessness differently. Three commented that it makes you think about what the stories are of the people experiencing homelessness on the streets. Other comments were along the lines of the realization that it could happen to anyone. One participant mentioned they previously felt homelessness was a thing so far away from them. Another participant commented: 'I feel that you can be in a very vulnerable situation extremely quickly, even if you feel very secure, it can change.'





Bringing attention to hostile architecture

ESPINAS DE BARCELONA

As part of my final master project about homelessness in Barcelona, I aimed to raise awareness about hostile architecture in the city. What struck me most were the spikes I came across on my many walks around the old city. I created an Instagram account *Espinas de Barcelona* (thorns of Barcelona, referring to the spikes and the famous *Flor de Barcelona* that decorates most sidewalks in the city) to post pictures of the hostile architecture.

Additionally, I raised awareness through a tiny guerrilla street art protest. In this tiny protest, I housed a total of fourteen tiny homeless guys in the spikes that are meant to keep them away. In doing so, I brought attention to the hostile architecture and gave visibility to a group of people who are systemically made to be invisible.

In the middle of the night, between 3 and 5 on a Sunday morning we set out to house the figures. Besides the figure two small speech bubbles were glued to the spikes. One posing a question or a statement to make people think about homelessness and the intentions of hostile architecture, the other referencing Espinas de Barcelona.

Five different sentences were used, the ones shown in the photos here read '*Escondernos no nos ayuda*' (hiding us isn't helping us) and '*Si no estás aquí, ¿donde?*' (if not here, where?). Others were '*¿Queremos una ciudad hostil?*' (do we want a hostile city?), '*¿Quién puede estar aquí?*' (who is allowed to be here?) and '*Sin hogar y sin ciudad*' (without roof and without city).





Si No
ESTAS Aqui
¿DONDE?

The following day I went to check on the little figures to see how many survived the first night. As I was taking pictures of one of the figures that we had put in front of a supermarket, a man walked up to me to tell me that these little dolls represent the homeless. He told me that he had seen another one further up the street. I asked him what he thought of them. He expressed that he himself at the moment was experiencing homelessness and really liked them and thought about taking one. I explained to him that it was my project and that we put them around the city the night before. I told him that it was a protest against hostile architecture. He did not seem to know that the spikes were put there to deter the homeless, still he very much appreciated the figures as he saw it as a little gesture honouring the homeless in the city.





Making movie props

(R)EVOLUTIE

For the 2022 film (R)Evolutie by Toneelgroep Maastricht, directed by Servé Hermans, I designed and created two film props. Creating these props was a freelance job.

(R)Evolutie is a dystopian scifi comedy set in 2040. In this future all intimacy happens in virtual reality and are people able to upload their consciousness to the cloud. For these scenes I made two VR glasses and a helmet.

The designs are all 3D-printed with PLA, sanded and spray painted.



EAISI Experience lab

SWARM ROBOTICS

For a while during my master I worked to convert AI research into tangible demos for the EAISI Experience lab. I worked on three demos, two of them are covered in more detail in a previous portfolio. The Swarm Robotics demo showcases how four little robots (Anki Vector) respond to each other and interact in order to collect cubes and deliver them across a maze.

For this project I had to re-design the arm of the Vector bots and the cubes so it would be easier for the robots to pick up the cubes when approaching them at an angle. The new design works with magnets which ensure that the cube moves into the right place when the robot is near.

The maze is made from laser cut plywood. The stickers on the walls of the maze help the Vector bots with orientation.







SUPPLY CHAIN MANAGEMENT GAME

Another demo I worked on was the Supply Chain Management Game. The original board game was made by Remco Dijkman and Willem Jaarsveld.

The Supply Chain Management Game can be played with two people on separate boards. On one of the boards the person playing the game is advised by an AI, the other player has to make all decisions on their own. The objective of the game is to sell products to retailers, this is done by moving parts and products along the supply chains on the board.

In this project, I was responsible for the graphical design of the board and user interface and the design of the play pieces (the tablet and game computer casings, and the electronics).

AGROBOT

The third demo I worked on in the demo lab was the Agrobot. This robot uses vision recognition to find and pick fruit.

In this project, I was responsible for designing and building the physical environment. The physical environment consists of three mesh panel hedges, decorated with fake hedera vines and three fruit crates. The hedges have magnetic 'stems', which the fruits can be attached to and plucked from. The fruits (lemons, strawberries and apples) are made from 3D-printed PLA.





The world is wide open

WHAT'S NEXT?

I can see a multitude of possible futures for myself, not all mutually exclusive and definitely not limited to the Netherlands.

Firstly, I would love to work on more projects challenging people's beliefs about free will and meritocracy (for example projects related to welfare, incarceration, punitive action, or more projects related to homelessness).

Secondly, researching hostile architecture sparked my interest in public space design and urban development. The equal access of our shared public spaces has always been under threat of privatization, I'd be interested in working on projects that fight against that.

Thirdly, I can imagine myself pursuing a career in academia. Probably not in design however, but in philosophy.

In addition to these directions there are many places I'd like to live and many things I'd like to do. As of right now nothing yet is certain and both the world and the future are wide open.

