# Max ten Oever portfolio

Hi my name is Max ten Oever,

I am a creative engineer with a wide range of expertise.

I design for industrial applications as well as conduct more conceptual/artistic projects.

This portfolio shows some of the relevant projects I have done.

Currently focused on: material driven design, sound design and world building.

## KUBO sealer360 2023 @TU DELFT

embodiment design for client (team effort)

As part of my master in Delft we worked for greenhouse innovation company Kubo to design and build a machine that improved their existing active climate system.

The machine we build was able to seal the LDPE ventilation hoses into multiple compartments during the installation process by using ultrasonic frequency technology. With these compartments the air could be more efficiently distributed.

The project lasted for 5 months from brief discussion to testing a working prototype in the real environment.

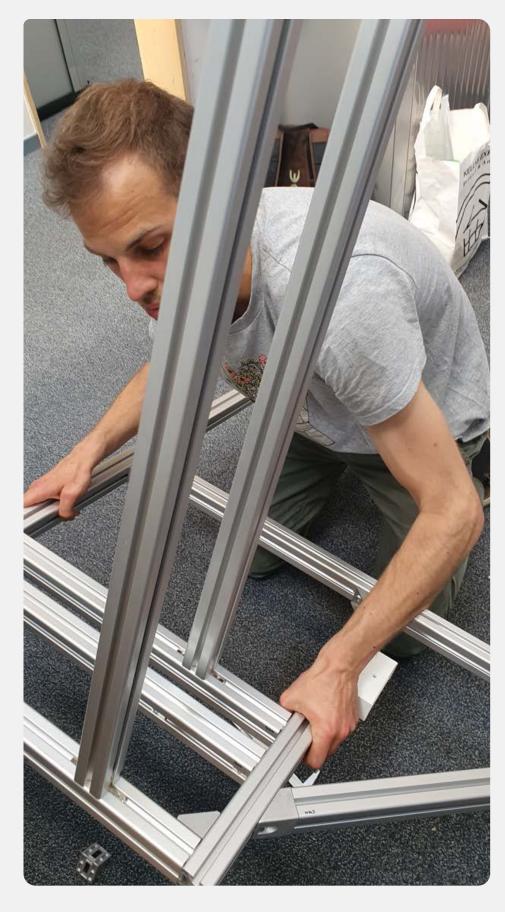
KUBO currently continues with our work to make the product a reality.





## KUBO sealer360

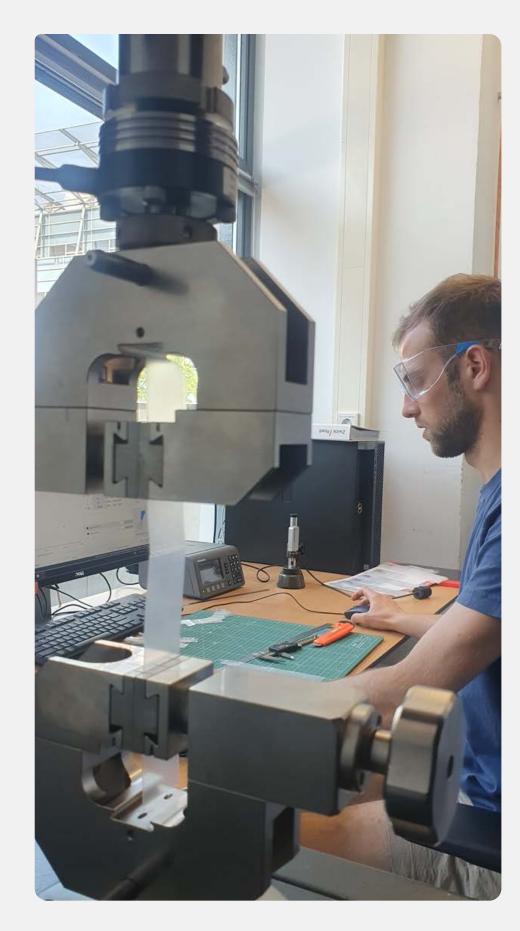
#### Approach



Realisation, making the product from scratch combining bought parts and designed parts.



Collaboration with multiple parties to gain expertise and acces to high end parts.



Validation of our main requirements.

## Tapestry crust 2019 @TEXTIEL LAB TILBURG

textile design

Tapestry crust is a woven tapestry object made at Textiel Lab Tilburg.

A weaving machine and post weaving machine techniques were used create a sturdy voluminous organic looking structure. Resembling a 'crust' with a symbol engraved into it.

Later I made a small clothing collection revolving around the tapestry to create a visual story where it belonged.



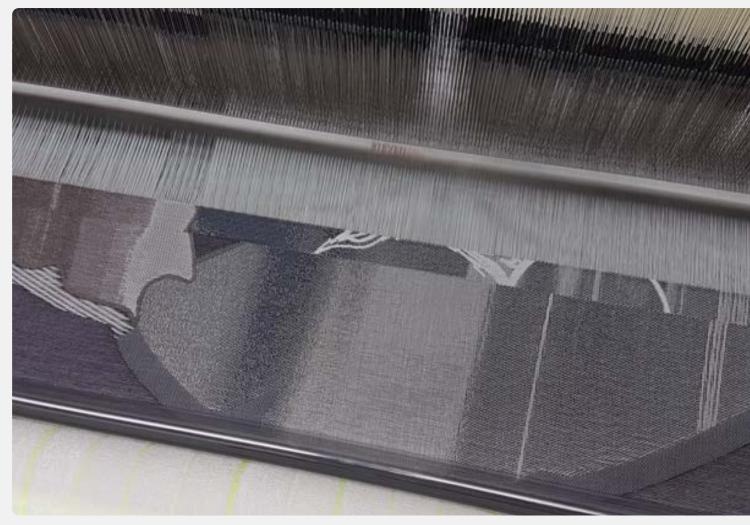
## Tapestry crust

#### Approach

3D expansion exploration



exploration shrink yarns



'2D' production on big industrial loom



3D confection

Testing the shrink yarn density in the weft to create the desired result in 3D expansion. Although eventually melting yarns were better suited for the 'crust' texture.

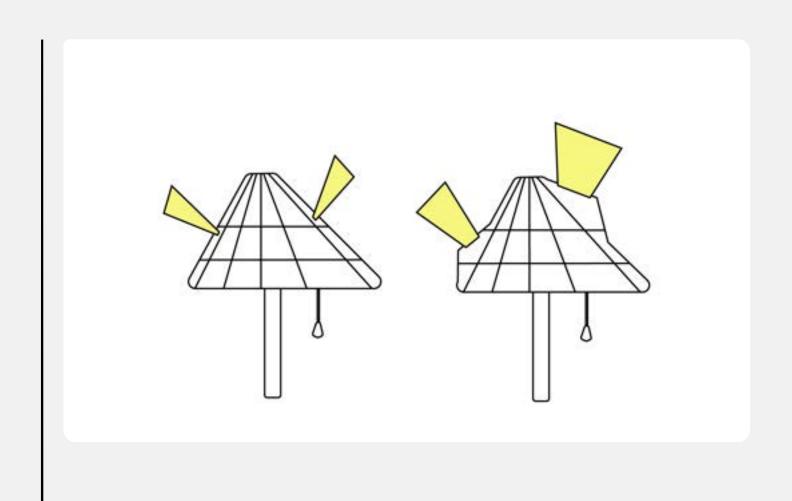
The loom is not the end, confection is the last step to get the final shape.

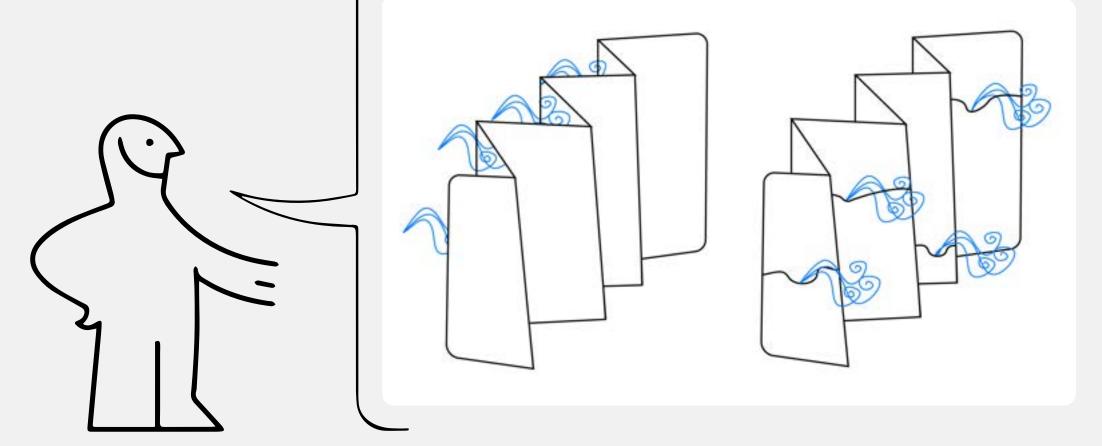
### Bi-stable textile 2023 @TU DELFT

material design for IKEA (duo effort)

For the material experience lab at TU Delft we made a concept for a 'multimorphic textile' to present to IKEA for future textile home appliances. From a material driven perspective.

Our concept was based on integrating 3D printed flexible parts into the woven fabric to create a bi-stable textile. A textile that can be 'clicked' into two different modes. It can be used for different ways of light diffusion as morphable hood on a lamp or adaptable ventilation pockets in room dividers or curtains.









## Soft communication 2020 @TU EINDHOVEN

Internet of Materials/HCI

Future concept for assembly line factory.

A hyper-soft sleeve which enables low threshold haptic communication between worker and factory system. The design puts the emphasis on a physical bond between the co-bot and worker.

The key technology is this project is visual Al learning. To be able to use the inherent material characteristics of the sleeve as input without any sensors. 'Smartifying' the material in a cheap and robust way.





## Soft communication

#### Approach

Quick prototyping, exploration of inherent material characteristics



Exploring different soft material parameters and meaning of interaction through embodied roleplaying.

vision: no electronics

## Wearable rating system 2018 @TU EINDHOVEN

design research/wearable technology (team effort)

Addressing the controversy of a social credit system.

Usually these systems are tucked away in social/service apps. With this design research we tried to witness the effect of pushing it to the surface by integrating a physical rating system into 'future' office wear.

The participants were asked to rate their team members while working together by touching the conductive 'negative' or 'positive' patch. This rating would then be recorded and later discussed.





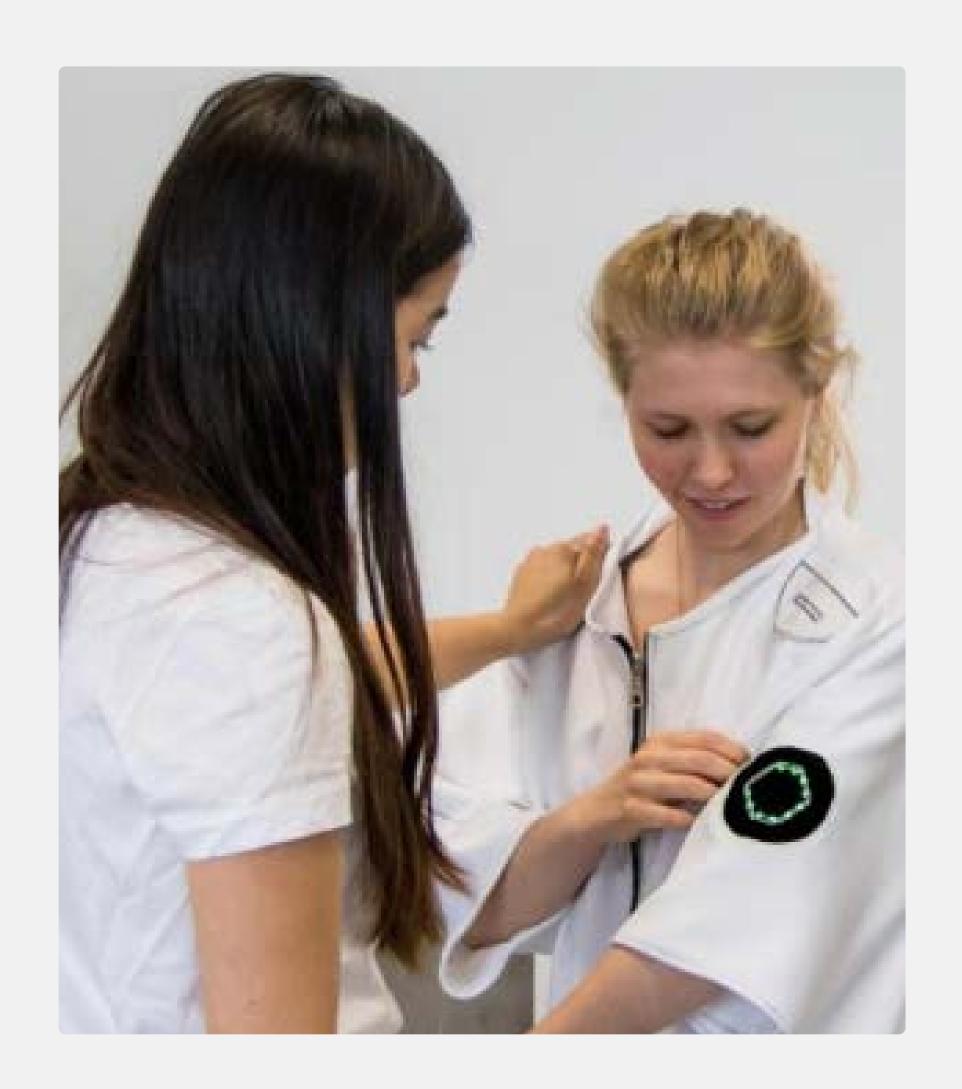
## Wearable rating system

## Technology 'smart' textile

The patches were embroidered with conductive yarn to send a signal upon touch.

This signal was then programmed to add a green or red light to the LED ring in the sleeve.

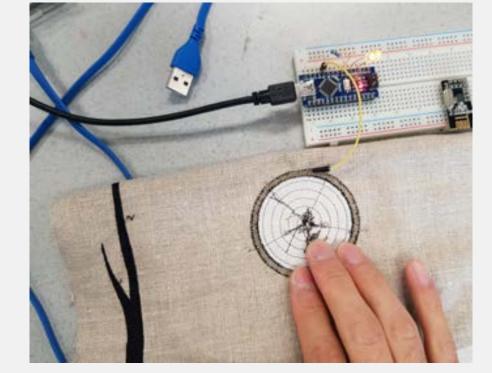
This signal was then wirelessly transmitted to the system to keep track of the 'score'.













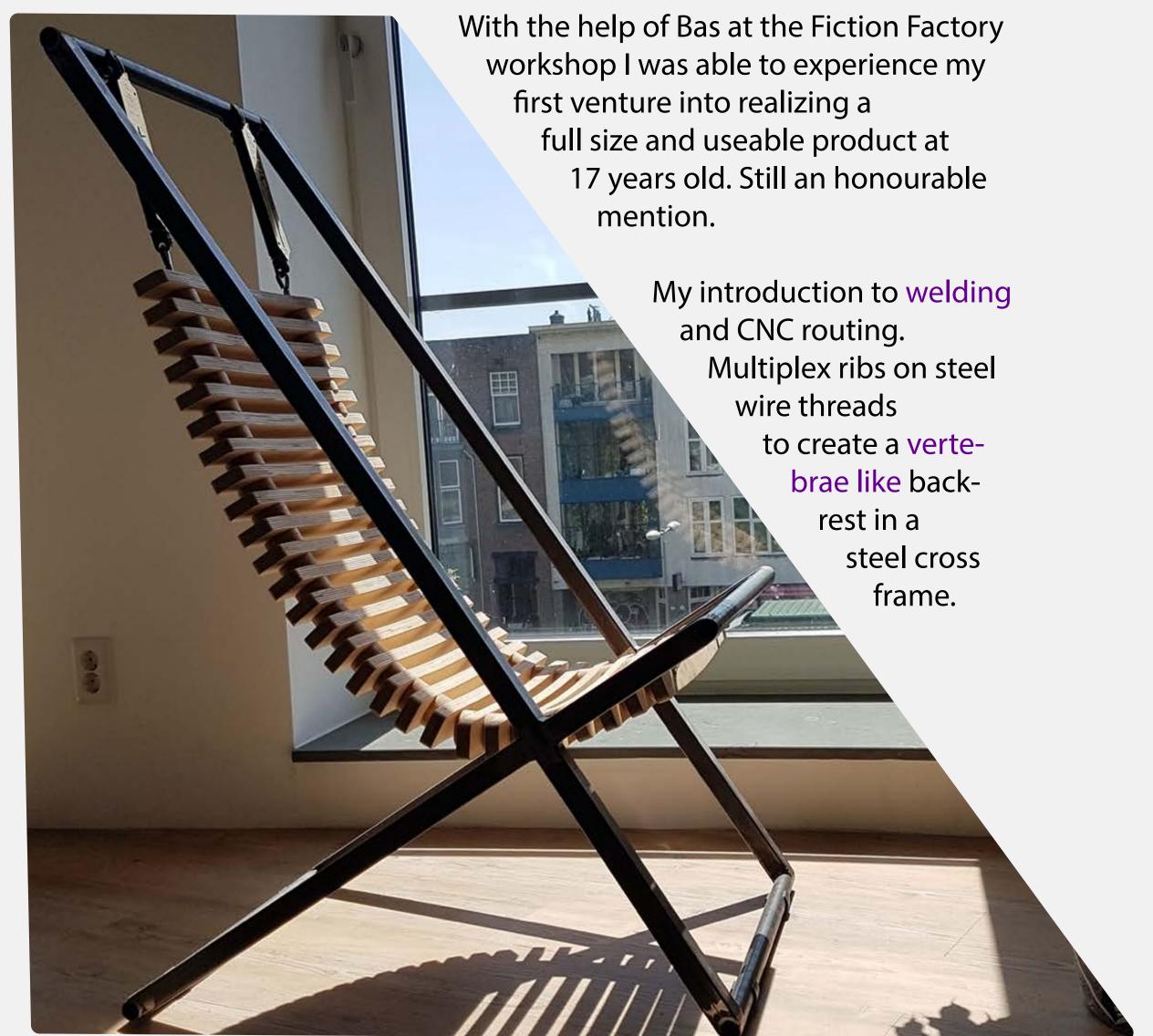


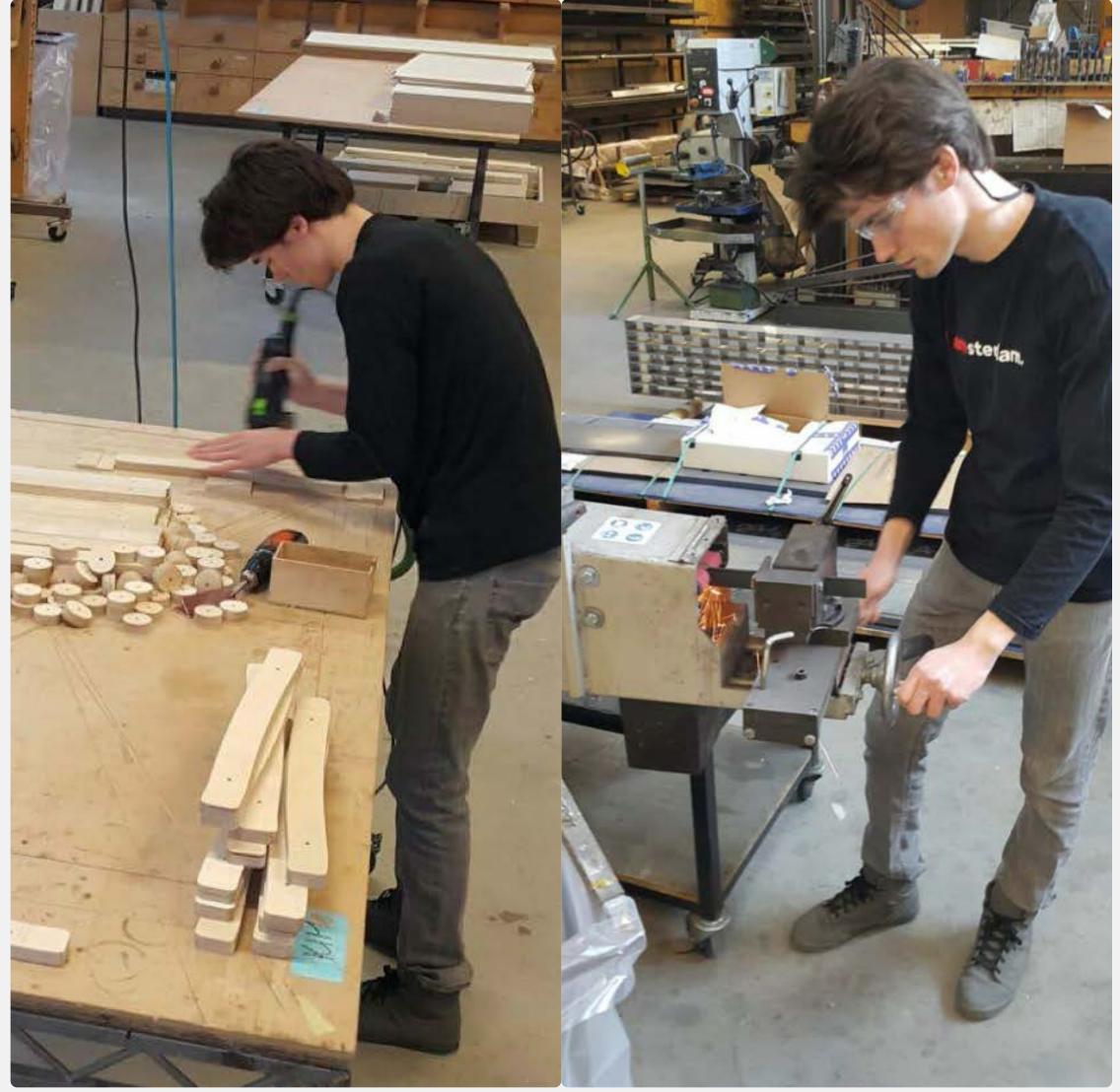


Different embroidery iterations

## Vertebrae beach chair 2016 @OWN INITIATIVE

ergonomic furniture design try-out





## O.M.A sound design 2021-2024 @OMA

video sound design/composition

Together with architectural firm OMA we made three different types of videos.

I was responsible for the sound design/composition and voice over processing to elevate the video to a more complete product.



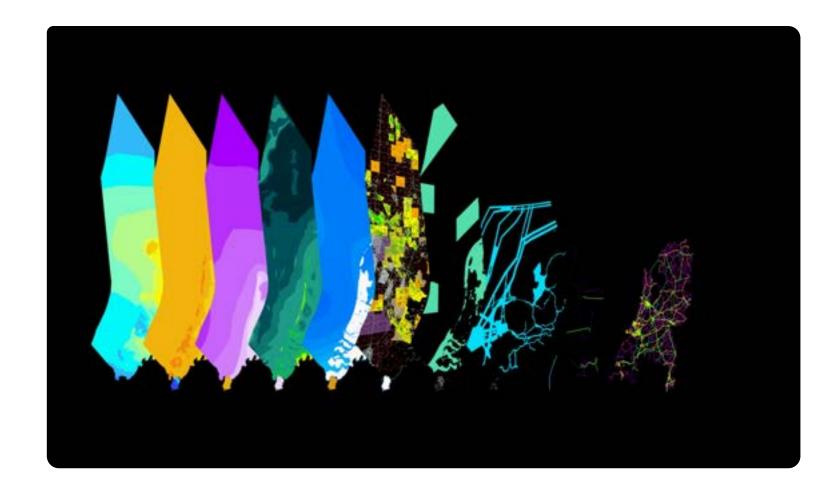
#### Hospital of the Future

A conceptual video made during the pandemic about the relationship between the city and the hospital in the past, present and future. This video was shown at Venice Biennale and later in other architectural conferences.



Ballada

Video for a new housing project concept.



**Energie transitie** 

Video about the Energy Transition in the Netherlands.



## Music 2020 - now @OWN INITIATIVE

production and recording



skylar - Fantasies are Enough 2020 EP

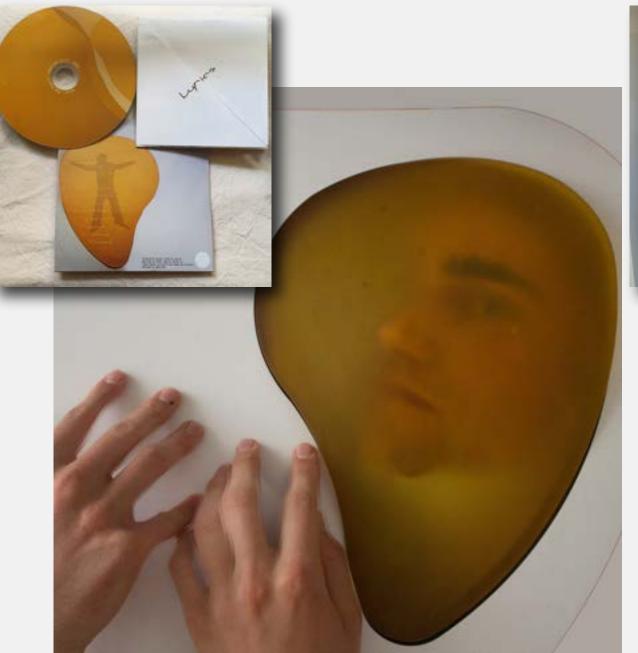




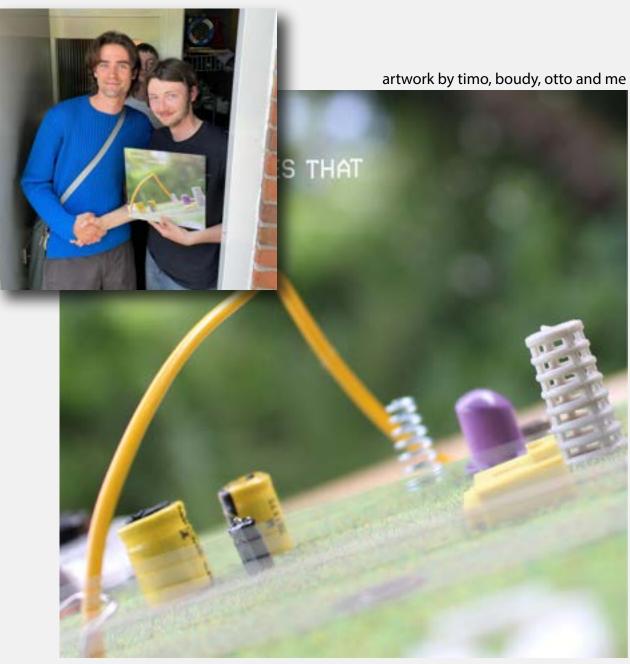
skylar & ity - flowerlovethesis 2021 single



skylar & emeel - shatter shatter 2021 single



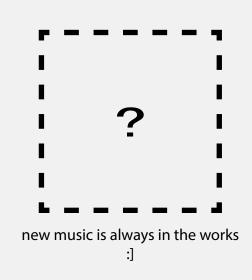
skylar - pod console EP 2022 CD release with folded lyrics booklet



a fungus - It already does that 2022 album vinyl release

Skylar is my electronic adventurous pop solo project and 'a fungus' is a math-pop/folk band project I share with 3 of my close friends.

With both acts I also perform. Some places include; Amsterdam, Eindhoven, Groningen, Rotterdam, London, Brighton, Genk, Tokyo.



## Tangibility? 2024 @TSUKUBA UNIVERSITY JAPAN

Media art

'Tangibility?' is an interactive sound art installation.

The shadow of the visitors is being projected onto the wall. Every 15 seconds these shadows are then translated into a spectrogram (x: frequency y: time) that is then played through the room.

The shadows are a negative of the spectrogram. This means the shadows 'block' the sound and white noise becomes more coherent through occupying the space. Together you can try to create cohesion in the sound chaos.

The installation questions tangibility by combining two immaterial concepts, shadow and sound.

The shadows are a projection of the visitors in the space where they are later 'burned' onto the wall and 'literary' translated to their matching soundscape.





