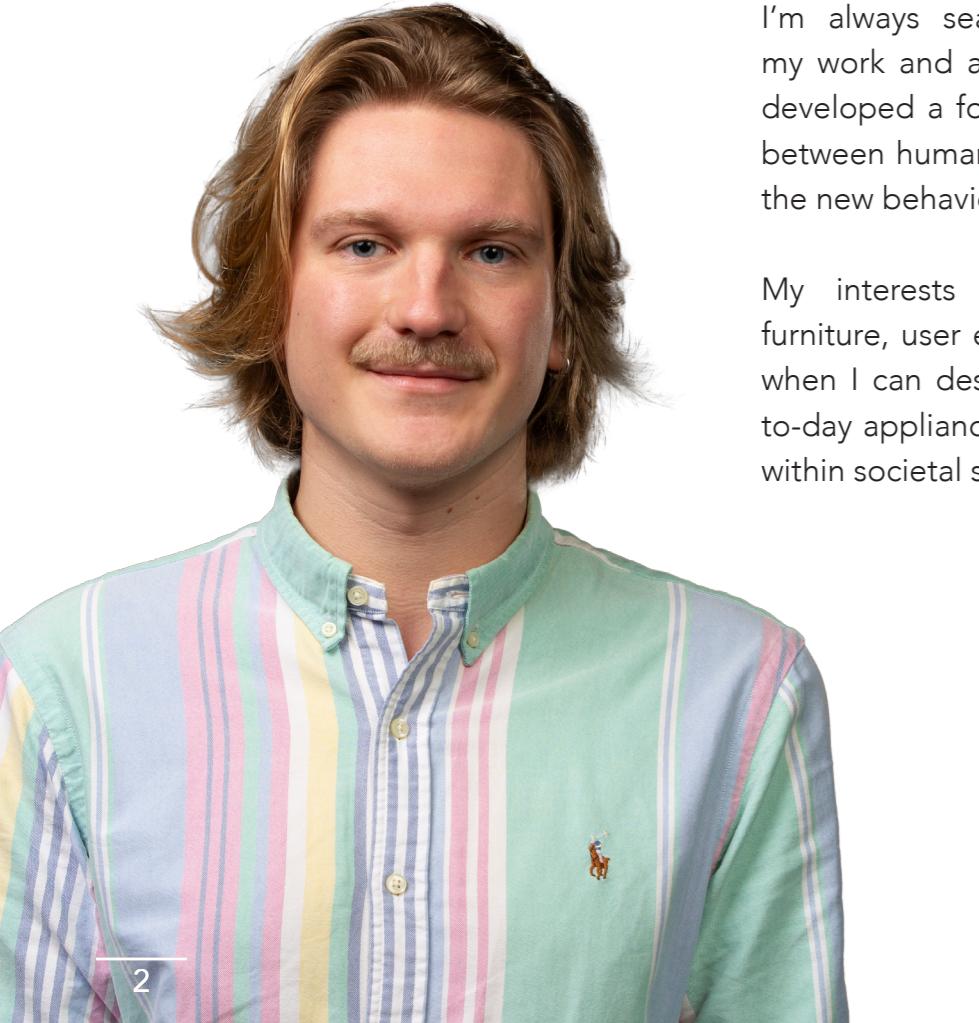


portfolio.

GIJS WELS



Hi,

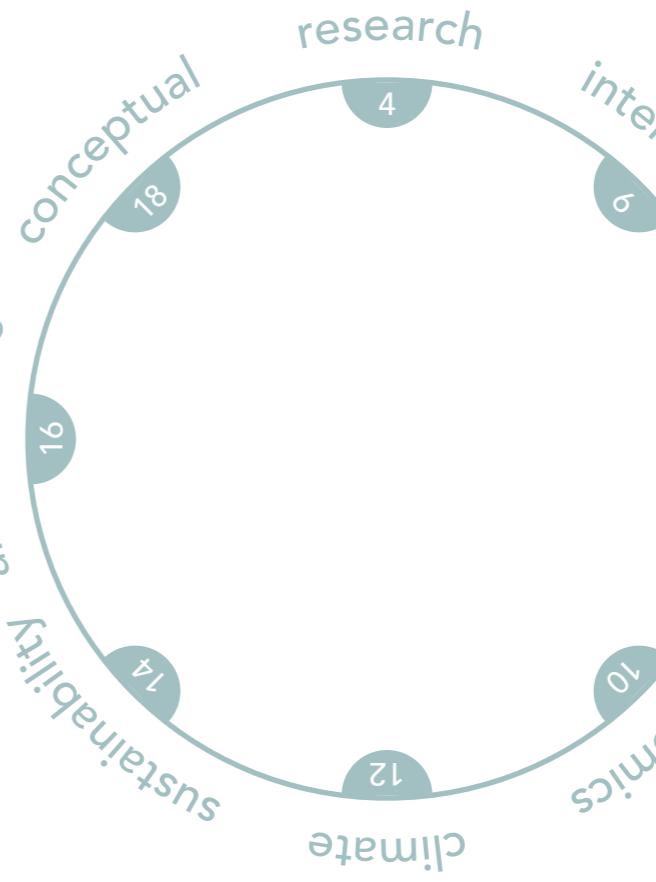
I am Gijs Wels.

I'm always searching for societal relevance to my work and as a designer and engineer, I have developed a focus on the relationships we create between humans and the designed environment - the new behaviours and experiences they enable.

My interests are human factors, well-being, furniture, user experience, and innovation. I thrive when I can design on different scales. From day-to-day appliances for households to public spaces within societal systems.

"Seeing the same, but seeing it in a way nobody has ever seen it before."
- Jules Deelder

me. index.



research through design.



ahrend

PausePing

G. Wels (2024)

click for: [extra](#) - [news](#) - [thesis](#)

*Bring structure to the workplace.
Communicate your break as an invite or
participate in someone else's break.*

Other Functionalities

To meet everyone's preferences, the device is equipped with options to place it where you want. It has a sturdy base that you can place flat on your desk, a clip-like function for thin screens and a hook for wider ones.



Obstacle

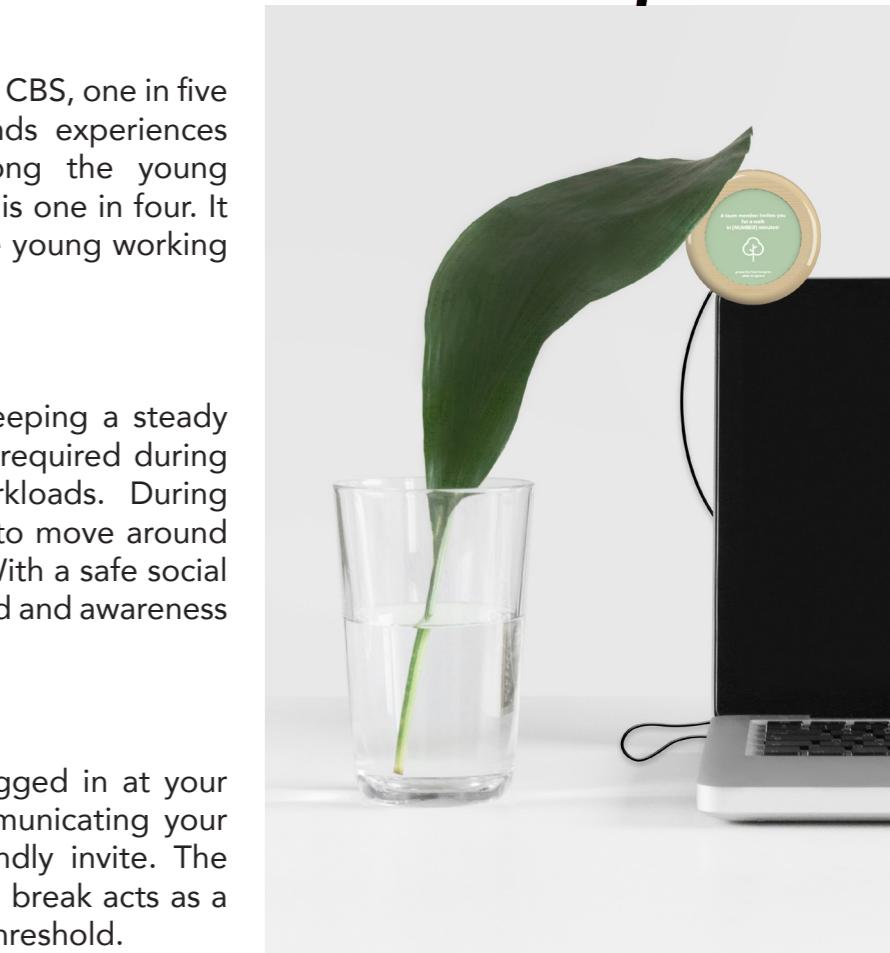
According to research by TNO and CBS, one in five working people in the Netherlands experiences burnout-related symptoms. Among the young working adults, age 18 to 35, this is one in four. It is expected to rise to one in three young working adults in 2027.

Opportunity

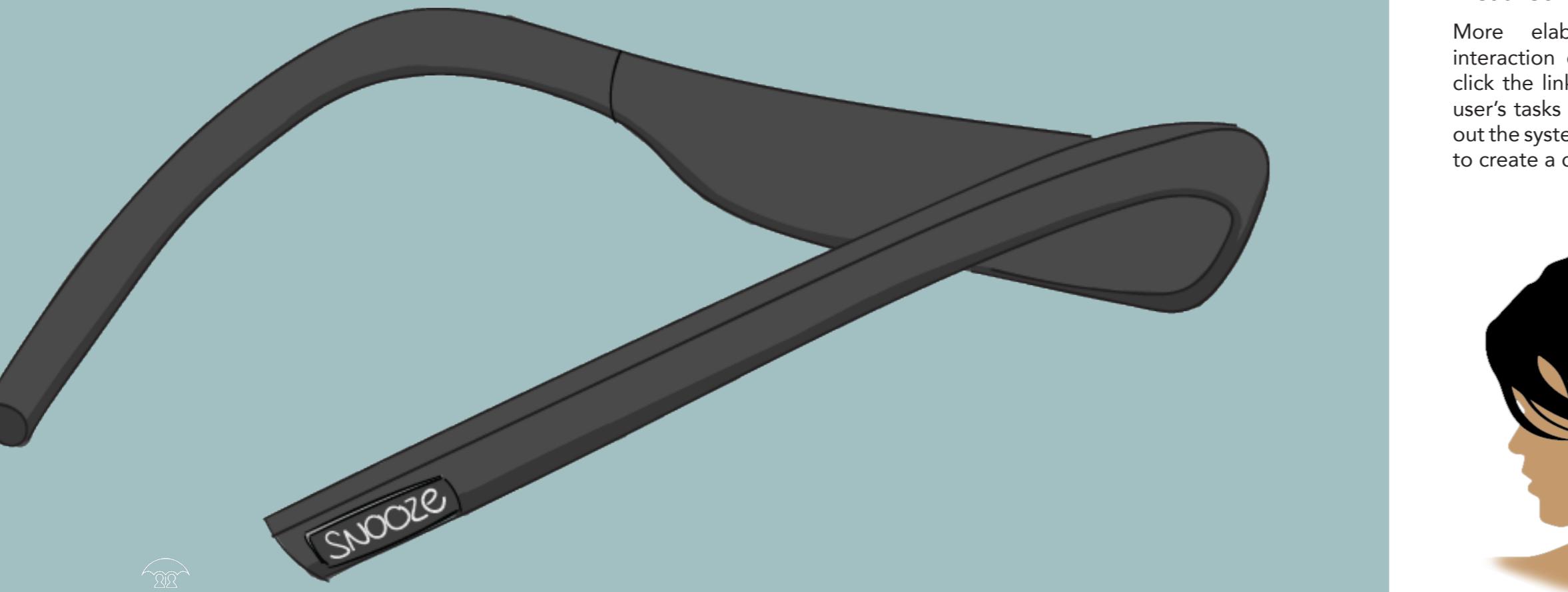
Micro-breaks are necessary for keeping a steady energy level and most important required during stressful periods with high workloads. During micro-breaks, it is recommended to move around to get blood circulation flowing. With a safe social context, taking breaks is normalised and awareness is created among colleagues.

Solution

A small device which can be plugged in at your workstation that day. When communicating your breaks, colleagues receive a friendly invite. The notification of colleagues having a break acts as a friendly reminder and lowers the threshold.



interaction design.

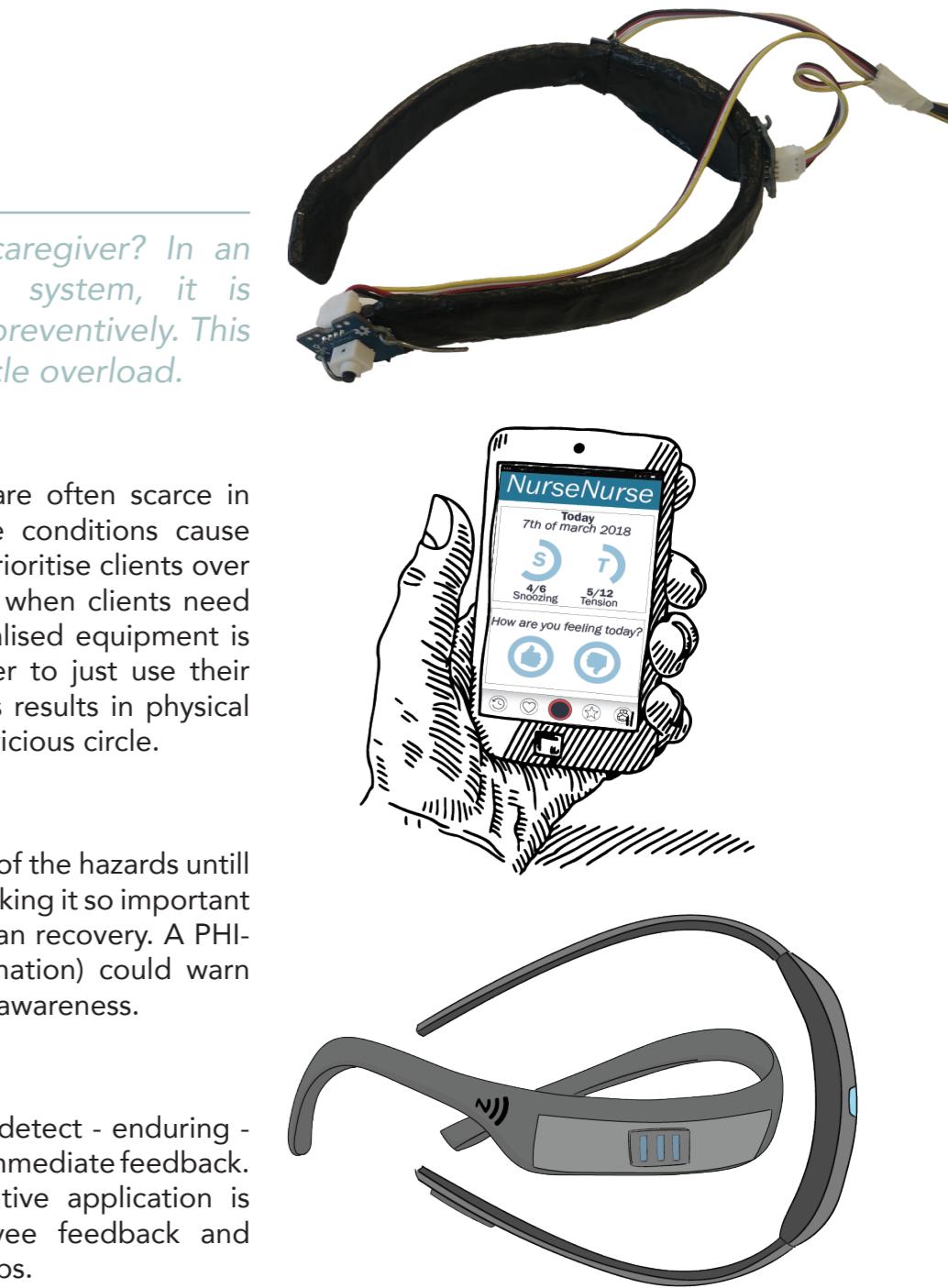


NurseNurse

M. Drummen, B. van der Linden, B. Verhoeff,
G. Wels (2018)

click for: extra

Who takes care of the caregiver? In an overburdened healthcare system, it is important to keep staff fit preventively. This product monitors the muscle overload.



Visualise Interaction

More elaborate information on the interaction can be found on my website, click the link above. An HTA illustrates the overloaded caregivers to prioritise clients over their well-being. For example, when clients need to be lifted out of bed. Specialised equipment is available but often it is quicker to just use their body strength. In the end, this results in physical complications which creates a vicious circle.



Obstacle

Time, finance and personnel are often scarce in the healthcare context. These conditions cause the overloaded caregivers to prioritise clients over their well-being. For example, when clients need to be lifted out of bed. Specialised equipment is available but often it is quicker to just use their body strength. In the end, this results in physical complications which creates a vicious circle.

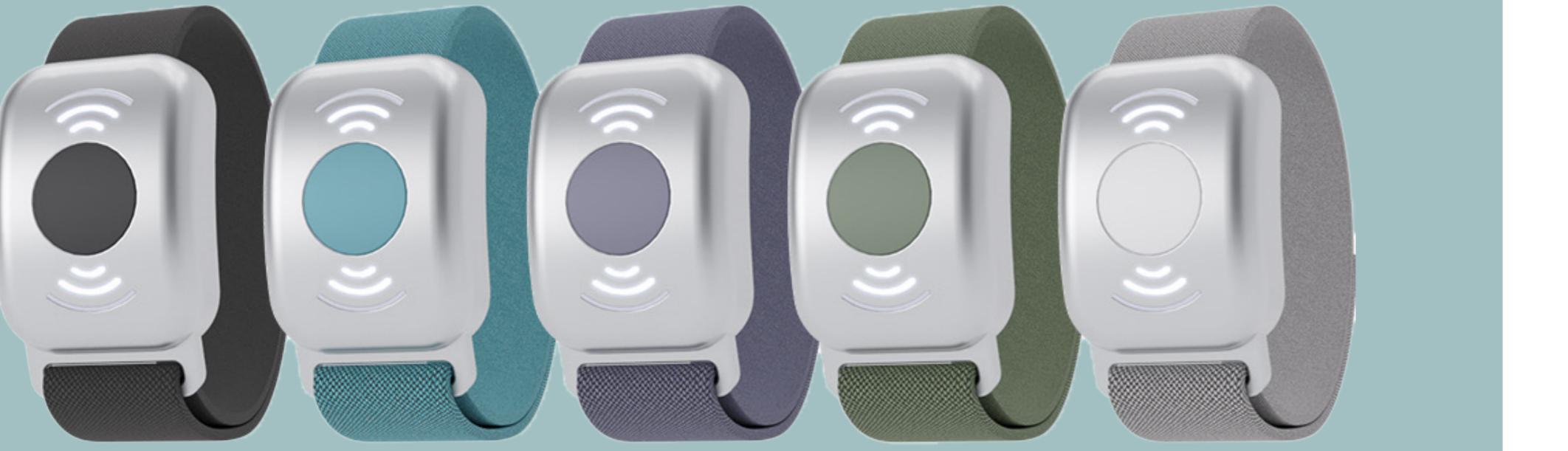
Opportunity

Caregivers are often not aware of the hazards until - irreversible - harm is done, making it so important to aim for prevention rather than recovery. A PHI-device (Personal Health Information) could warn caregivers and trigger positive awareness.

Solution

The PHI device is designed to detect - enduring - muscle tension and to provide immediate feedback. A corresponding and informative application is introduced to gather employee feedback and accommodate daily data and tips.

experience design.



CoolWatch

E. Andersson, F. Kristoffersson, D. A. Nilsson,
F. Takvam, F. Verburgh & G. Wels (2023)

click for: [extra](#)

Summers are getting warmer, i.e. climate change, and electricity bills are rising. The cooling bracelet brings individual climate adaptation to the home.

Experience Evaluation

The tests are set up according to Norman's UX design theory (2004). The complete user experience of the product is evaluated from a reflective, behavioural, and visceral perspective. The aesthetics of the concept are assessed based on Attrakdiff.

Obstacle

People often experience discomfort and frustration around the warmth in their bedrooms. In reaction many energy-consuming and unsustainable solutions are introduced. A trend is noticeable in the purchase of air conditioning in Northern Europe, which has an extremely burdening effect on water and energy supply.

Opportunity

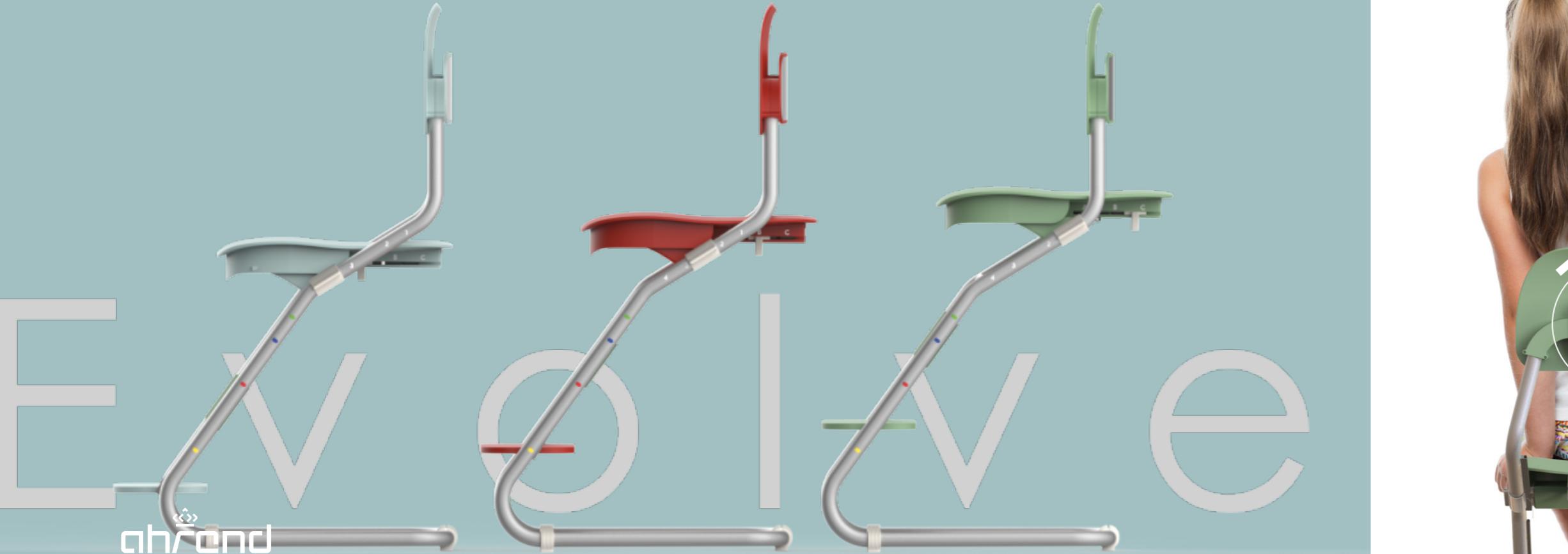
In short, the project revolved around "more by less, creating positive thermal experiences". The focus is on introducing a new product while decreasing the use of electricity and the pressure on the climate.

Solution

The final concept concerns a bracelet with an integrated cooling element that you can activate before going to sleep. Because it is placed on the wrist, the body cools down quickly, making it easier to fall asleep. The prototype is tested and the user experience is evaluated with a functional prototype and by simulating a 'hot room'.



ergonomics.



Evolve

G. Wels (2022)

click for: extra

One comfortable chair that fits all primary school students and creates an environment to improve their performance!



Wellbeing

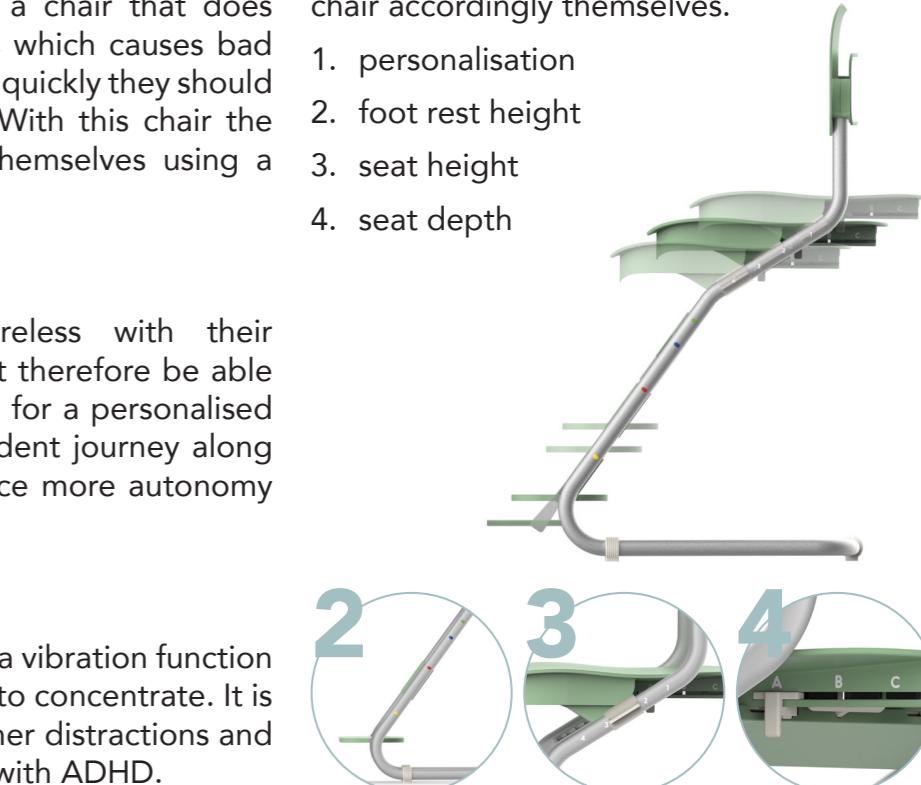
Every first day of the year, teachers and students go together to look for a suitable chair. For various reasons, children often sit on a chair that does not suit their body dimensions which causes bad posture. Because children grow quickly they should regularly measure their body. With this chair the students can alter the chair themselves using a simple system.

Autonomy

Children are sometimes careless with their surrounding and the chair must therefore be able to withstand a blow. By aiming for a personalised workspace that guides the student journey along the way, the children experience more autonomy and responsibility.

Concentration

The chair is also equipped with a vibration function for children who find it difficult to concentrate. It is a low frequency to filter out other distractions and is mainly intended for children with ADHD.



climate adaptation.



The project focuses on finding and designing new technologies to combat the urban heat island effect. The emphasis lies on implementing existing technologies and assisting governments in this transition.

StadsOase

G. Wels (2021)

The StadsOase offers a movable green oasis for bustling places in the city. It's not just a green future, it's a flexible green future!

Obstacle

It's getting warmer and warmer. Urban areas are more affected by this due to the urban heat island effect (UHI). A phenomenon that the temperature in those areas can rise 7 to 8 degrees more than in the surrounding rural areas. The biggest differences are noticeable in the summer periods, precisely at times when such temperatures already cause problems for residents.

Adaptive Functionalities

The square is multi-useable. Like a real oasis, the spot is used by locals for all kinds of activities. Plants and trees are placed in various large CORTEN-steel pots, which can be picked up and placed wherever. In the hustle and bustle of the city, within the greenery, an oasis of peace unfolds.

Opportunity

The asphalt, the concrete and the buildings are the causes of this development. The only sustainable solution is greening the city to make the urban areas more adaptable to these changes.

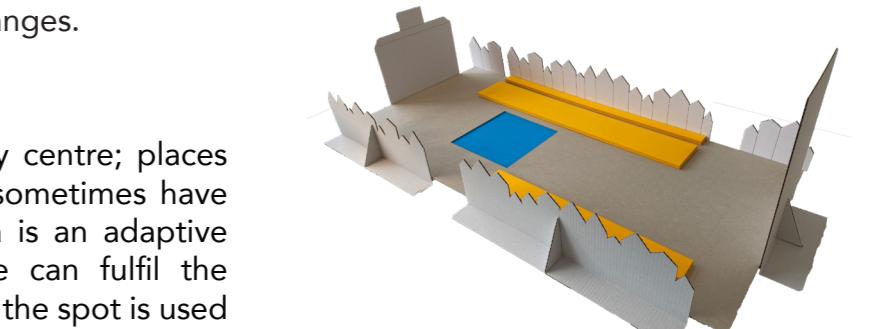
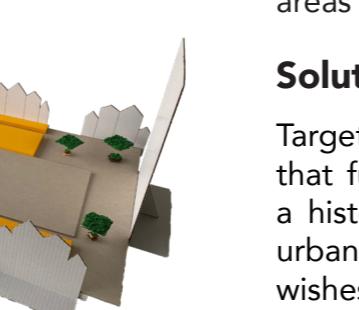
Solution

Targeting busy squares in the city centre; places that fulfil multiple functions and sometimes have a historical appearance. The idea is an adaptive urban oasis wherefore the place can fulfil the wishes of all residents. In addition, the spot is used to inform people of the issue and its hazards.



Water Source

The square is self-sufficient. Like a real oasis, the spot has a hidden water source. Underneath a water tank collects rainwater. Regular pavement is replaced by water-permeable tiling. The water is used for watering the plants and trees during dry periods.





A! Aalto University
School of Arts, Design
and Architecture

sustainability.

The project focuses on designing products and environments in balance with nature. Emphasis lies on the playful and calming aspects of nature through simple and biodegradable design.

NatureSeat

S. Feins, K. Miyajima, D. Sikorski, H. Wei & G. Wels (2023)

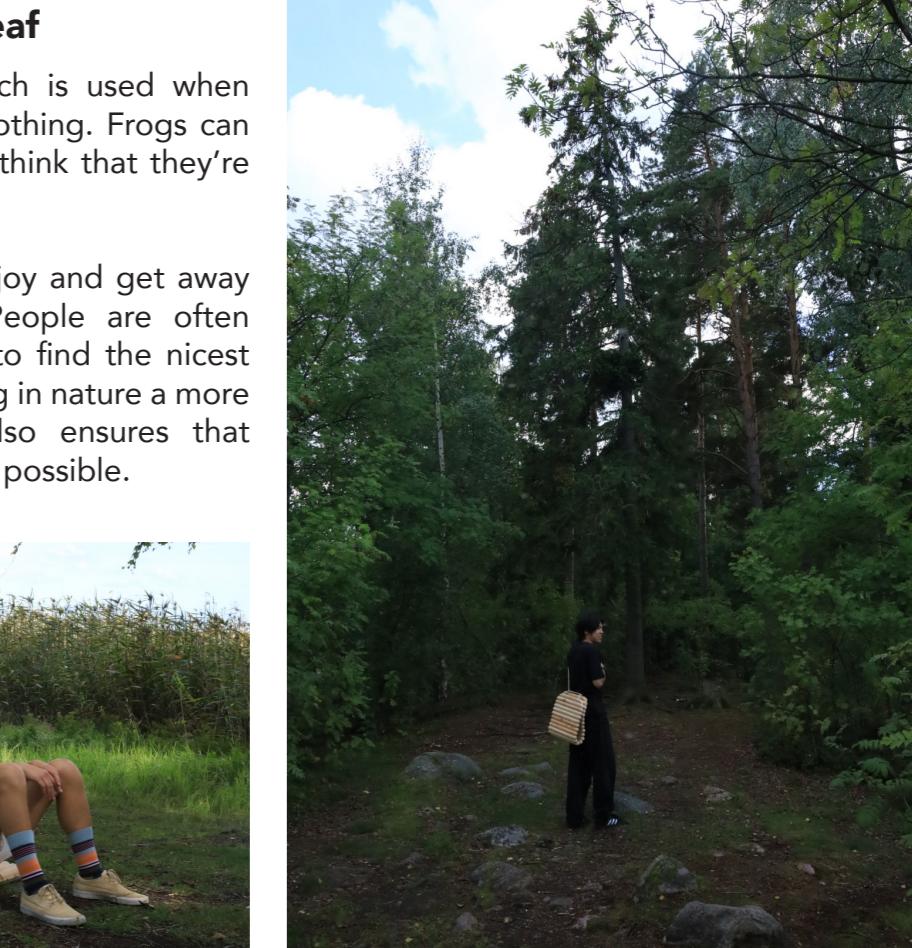
An active sitting space for Otaniemi campus locals that provokes creativeness by using the natural environment.



Lie down like a frog on a leaf

In Polish there is a saying which is used when people sit back, relax and do nothing. Frogs can sit still for a long time. I like to think that they're enjoying nature.

Nature is often used to rest, enjoy and get away from the hustle and bustle. People are often very curious by nature and try to find the nicest places. This solution makes sitting in nature a more comfortable experience but also ensures that people stay as close to nature as possible.





UNS
UNSTUDIO

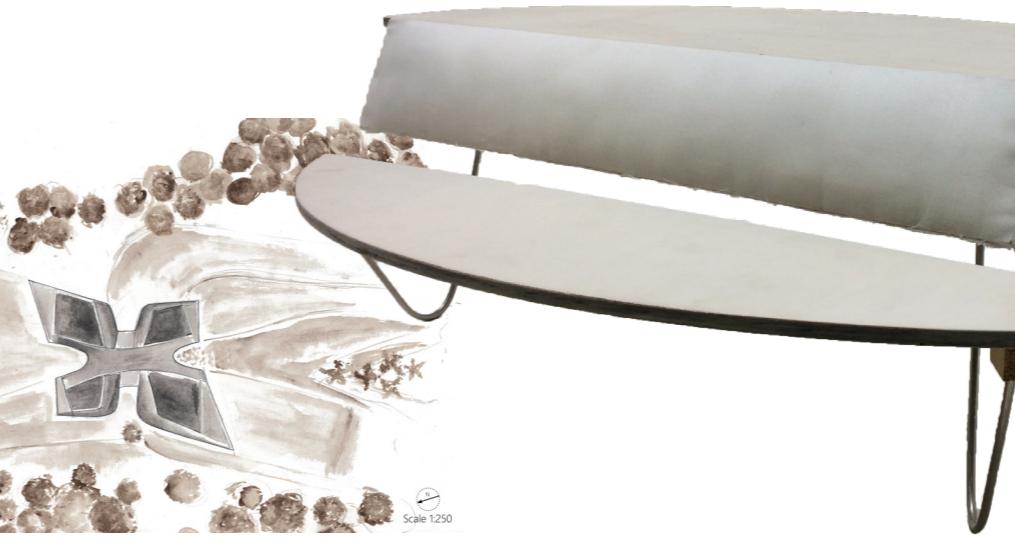
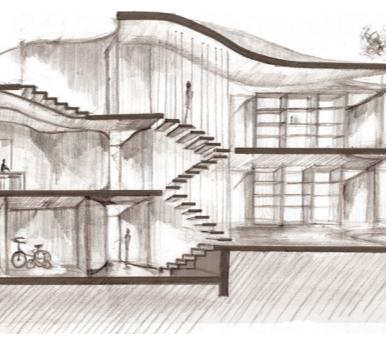
architecture.

This project revolves around architecture and focuses on gaining a feeling for the designed environment. The emphasis is on designing furniture for the building in question and creating mockups.

WhirlSofa

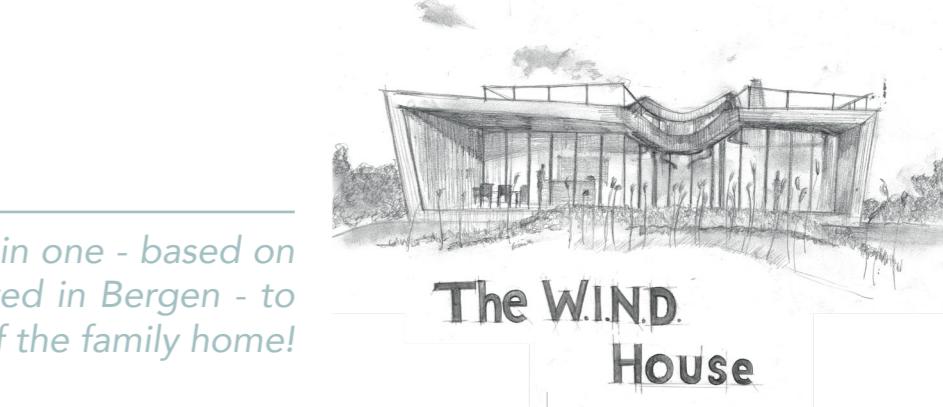
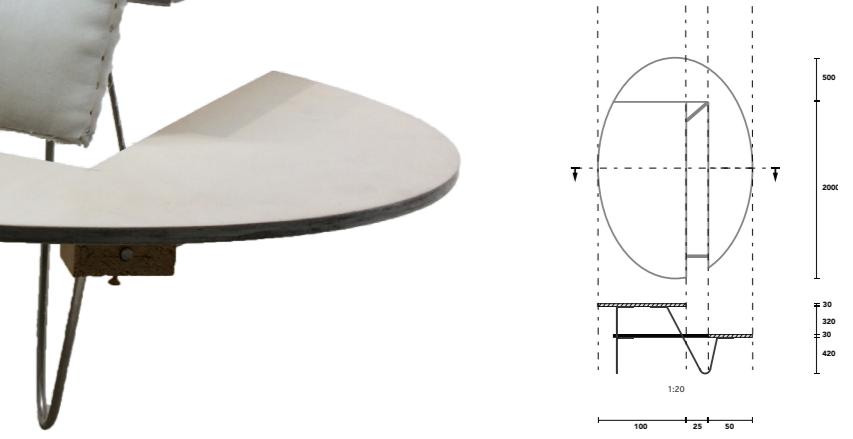
G. Wels (2019)

A swirling sofa and table in one - based on the W.I.N.D. house situated in Bergen - to enhance the social part of the family home!



Model Study

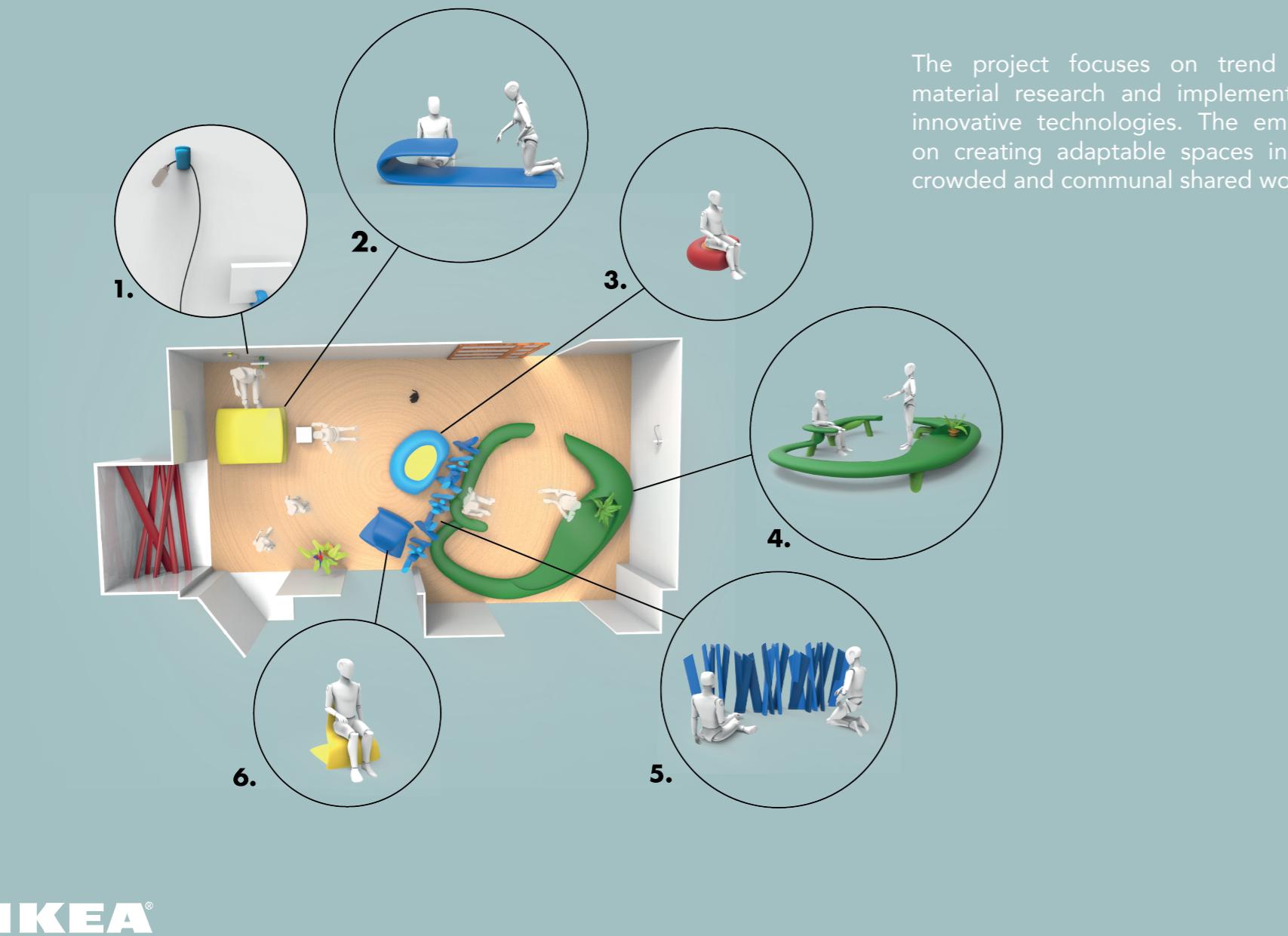
The W.I.N.D. House is a family house in Northern Holland. The base of the design is formed by the flexibility of spaces, the surrounding landscape and a "centrifugal split-level principle". This means that the house is centred around a staircase. Therefore, there are no hallways present in the building and all the spaces flow into each other.



Form Study

In this piece of furniture, the principle of the stairwell is also the centre of attention. As a chair flows into a sofa and as the sofa flows into a table. This ensures that different activities of different family members can be combined. This allows you to be together, but also to be just involved with your own activity. The W.H.I.R.L. Sofa consists of two parts. A wooden plate for the table and bench and a construction of metal pipes to connect these wooden plates.

conceptual.



K. Thomas, C. Vooren, J. Webbers & G. Wels (2018)

Möbler

MÖBLER is Swedish for 'furniture' and is the future of living: Build what you want, when you want and where you want!

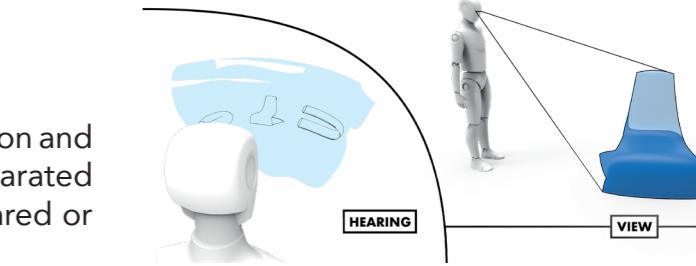
The Future

The future of living is smaller, like communal living or student dorms. MÖB is a multifunctional piece of smart furniture. It doesn't have one sole function, but can be used for many purposes. By contracting and expanding up to -/+ 50% of its original size, MÖB can change size and stiffness, making it suitable for many different uses.



Combine & Expand

The MÖBLER is specially made for the common and shared room. MÖBLER blocks can be separated or merged together, so furniture can be shared or enlarged.



Control

To adjust the shape of the MÖBLER, your eyes, hands or voice are needed. When adjusting MÖBLER, a hologram of the product will be shown in front of the user. This shape can be adjusted by hand. Like someone is sculpting clay, but virtually. While shaping it, the user can also speak, to simplify the process of shaping it in the form being preferred. Moreover, for a more personal interaction, users can manually make small adjustments by hand.

ide.

thanks.

Bye,

Thank you for looking into my portfolio!

I hope you enjoyed reading about the projects I am very proud of. Who knows, maybe we will see each other in the future!

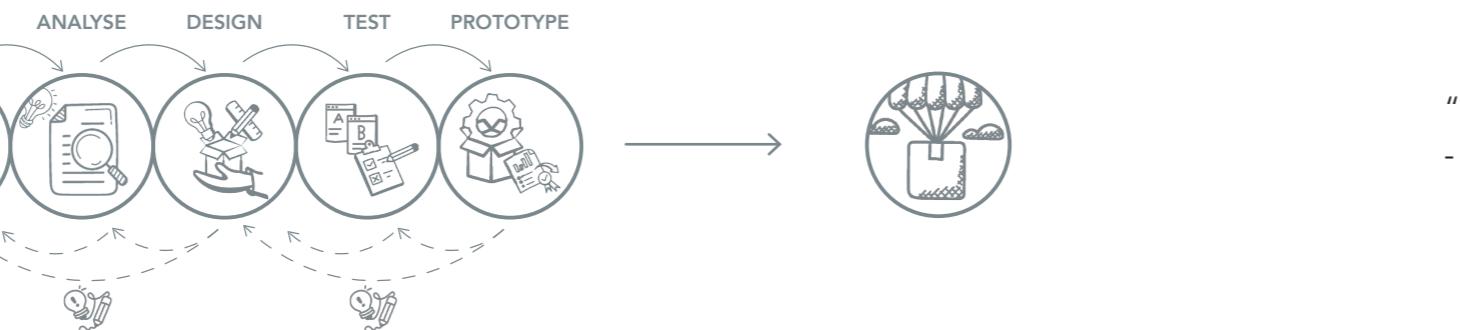
You can find information about my extracurricular projects on my CV. For more information and videos about my projects, visit my website:

gijswels.github.io.

Kind regards,
Gijs Wels



Industrial Design Engineering (IDE) combines technology, people, and business with design. Because of its human-centered focus, I have learned how to analyse (societal) issues, target groups, and markets and how to translate opportunities into concrete solutions. With the stakeholders involved from the beginning I start designing; constantly checking if I meet their wishes and needs. My strength lies in my curiosity and my drive for social contribution. Integrated Product Design (IPD), takes this a step further. Advanced prototyping, concept design, human-system interaction and experience design are all part of this. From concept to go-to-market product. Taking into account the vision, materials, and manufacturing. With enthusiasm, I analyse, set up tests and observe. I have an affinity for research, an inquisitive mind, and excel when ideas need to be turned into action.



"If you are aware of the limits, you can work limitless within it."
- Jules Deelder