

P O R T



F O L I O



Hello I am Leoni Fischer, currently finishing the second year of my Product Design studies at Bauhaus University Weimar, Germany.

I like to work hands on in many different fields of design, creating objects in the workshop or improvising things with other people. Also I enjoy writing and am right now challenging myself by teaching myself how to program HTML and designing my own website, which is lots of fun and somehow addictive.

This is a collection of my favourite projects. I hope to soon be joining a team and am looking forward to see and learn new things.

If you need more information or want to get to know me in person, feel free to drop me a line or call!

tel +491629842824

web leonifischer.com

mail hello@leonifischer.com

light up



Period **2 Weeks**

Semester **First**

Where **Bauhaus University Weimar, Germany**

Team **Pauline Temme, Leoni Fischer**

Can we shine?

Would we shine, how would we feel in our bodies?

How would we move?

How would we be perceived by others? Would our interactions change?

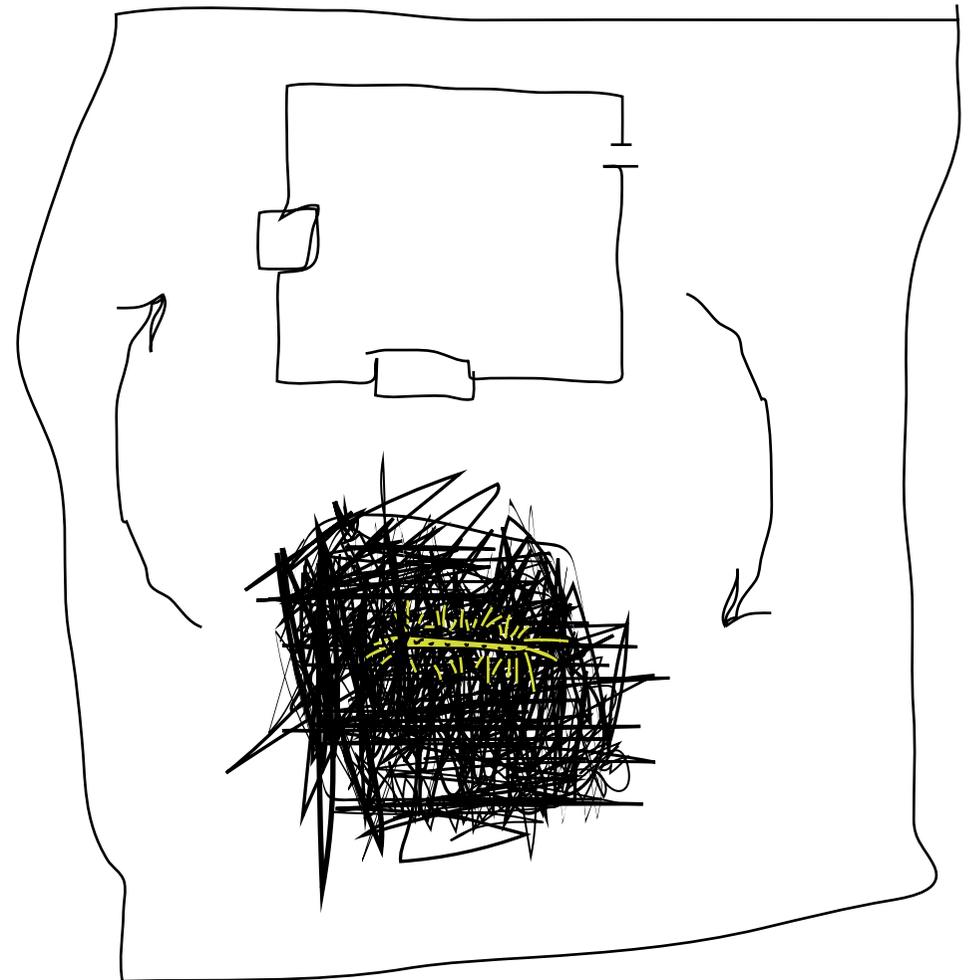
Light up is a back brace that illuminates the human span in its actual size, thus elevating the cyclist in traffic to an equal and clearly visible participant.

close the circuit
and glow

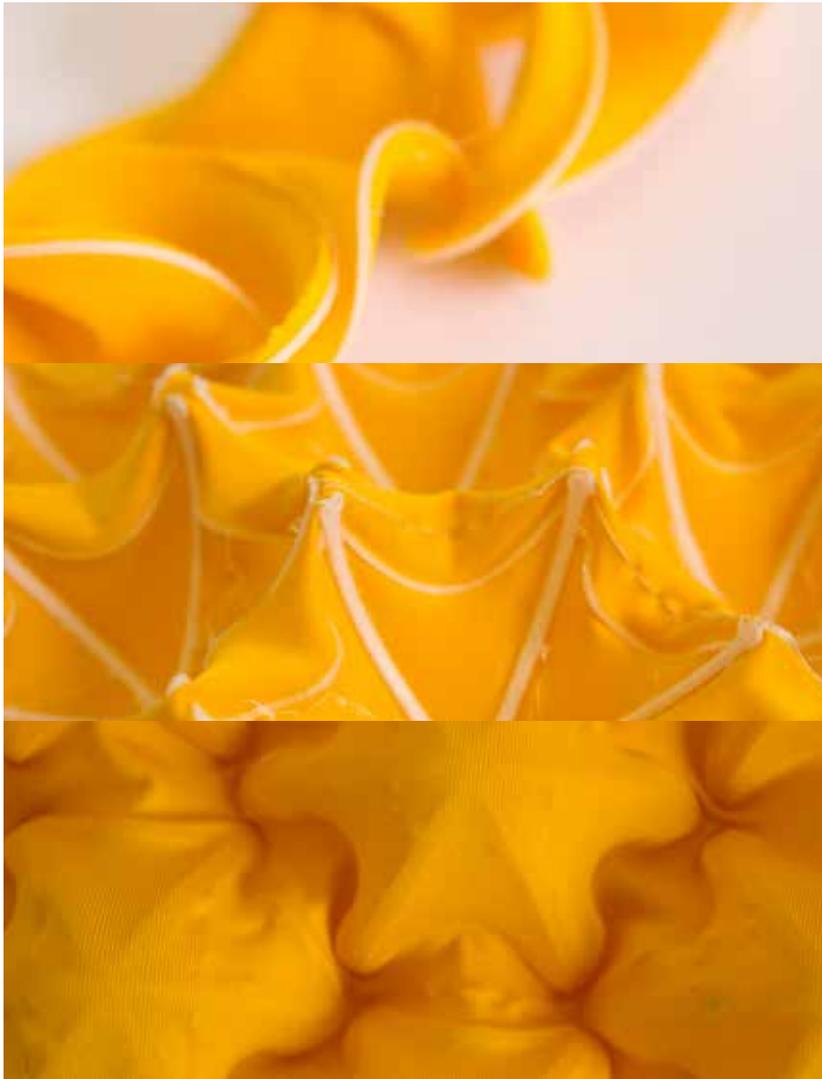
The light source is laying on a bright yellow reflector strip.
Contacts on two fingers close the circuit and make it shine.



To make the back brace, we sewed three components into the suit. The light source is covered with thin layers of a mosquito net style fabric that dims and diffuses the light.



programmable
textiles



Period **2 Weeks**

Semester **Third**

Where **Bauhaus University Weimar**

Team **Pauline Temme, Florian Giele, Leoni Fischer**

4D Printing adds a fourth dimension to 3D Printing. While usually 3D printed objects are solid, the textiles we printed on moved into their flexible shape after being removed from the printing plate.

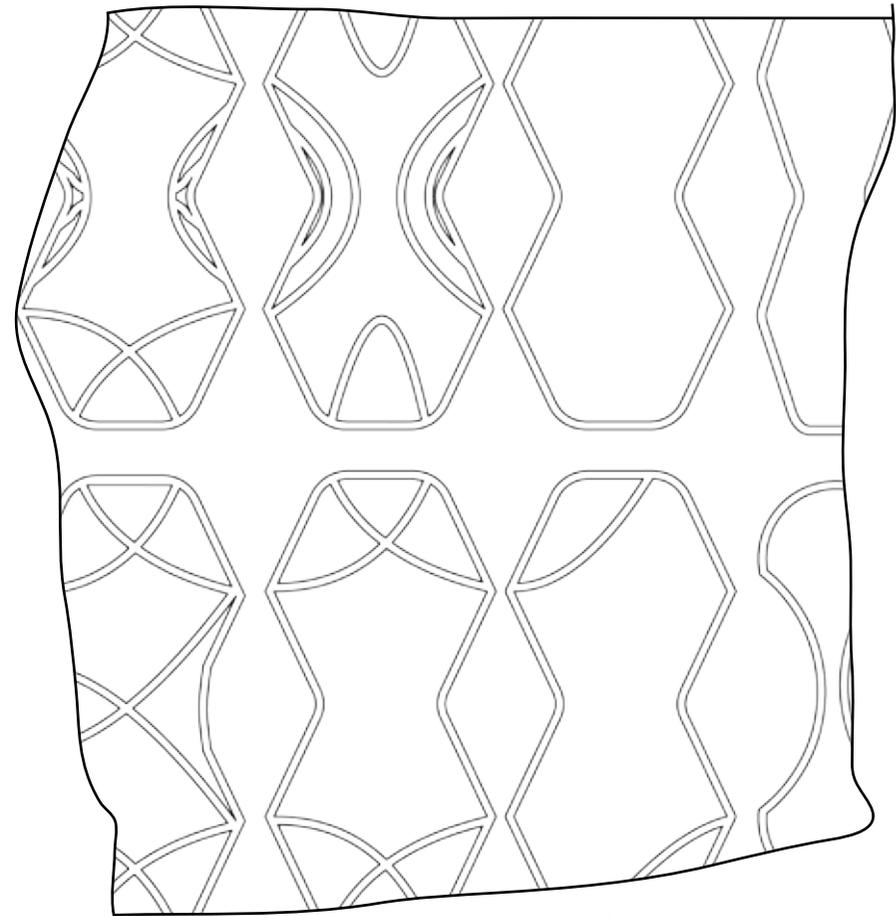
Our aim was to control and predict the result by researching empirically and simultaneously trying to write a grasshopper script that would help us to predict the deformation.

stems or die
- its rotating -



Aim of our experiments was to add an extra value and functionality to the deformation. Since the material itself makes a good sail surface, we were working on a flying object. We tried to control the behaviour of this object as far as possible. At last, we combined the propeller with the most steady flight behavior to multi-winged flying objects.

In an empirical way, we approached a single propeller segment. By minimally changing the wing structure, we were able to ascertain dependencies and conditions.



Propeller prints

Babel



Period **2 Weeks**

Semester **First**

Where **Bauhaus University Weimar**

Team **Pauline Temme, Antonia Ney, Leoni Fischer**

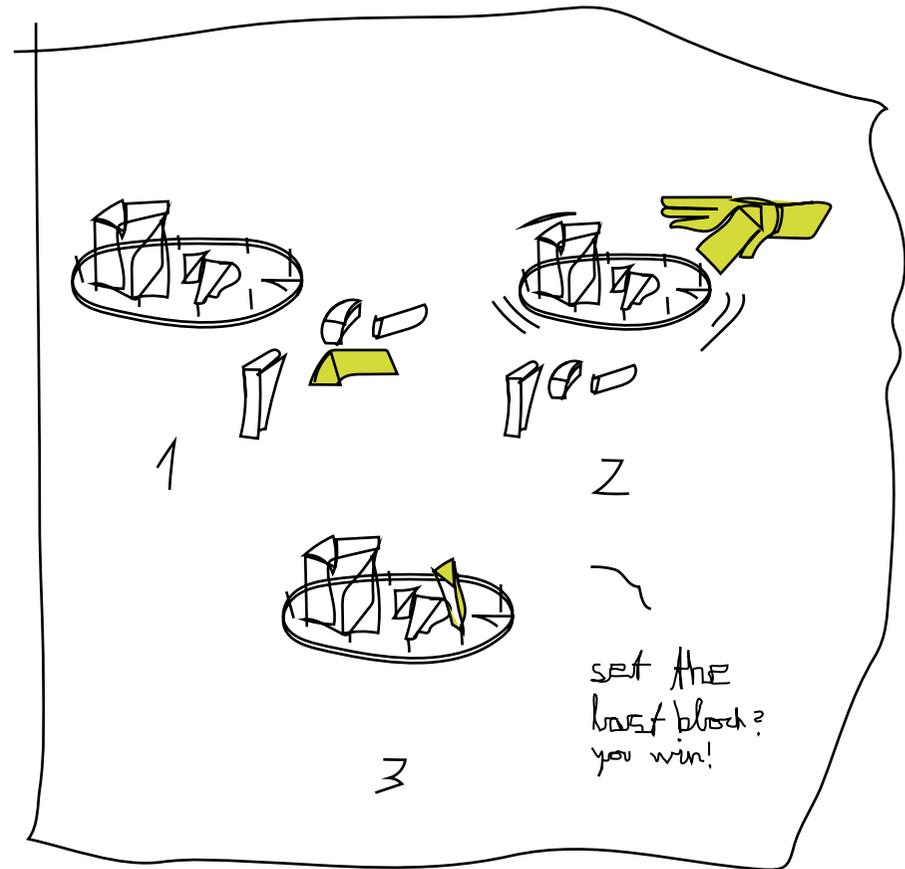
The centerpiece of the board game „Babel“ is a wooden disc, which is spun by the players like a wheel of fortune. While the disc rotates, the same player tries to build the block, which had been previously displayed on the disc, within the triangle. If the player fails to build the block and other stones, that were already built up on the triangle, are torn down the player must take them all. Goal of the game is to get rid of all your blocks first.

Spin the wheel
and build



At the beginning of the game, each player gets different building blocks, each with different characteristics. These are: a triangle, roundwood, small square block and a half-round.

Babel is designed for 3 players. However, since two hands are needed, for turning the disc and for placing the stone, it is also suitable for playing in three double teams.



Tetrahedral Kite



Portfolio 2017

Period **2 Weeks**

Semester **Third**

Where **Bauhaus University Weimar**

Team **Pauline Temme, Florian Giele, Leoni Fischer**

The Tetrahedral Kite was invented by Dr. Bell in 1902. Through the modular construction of the kite, he attempted to combine many modules to increasingly larger flying objects which would maybe even be able to transport people. Unfortunately, Bell's principle failed due to the heavy load of the wooden frames of the modules, which could only be lifted up to a certain point by the sail surface.

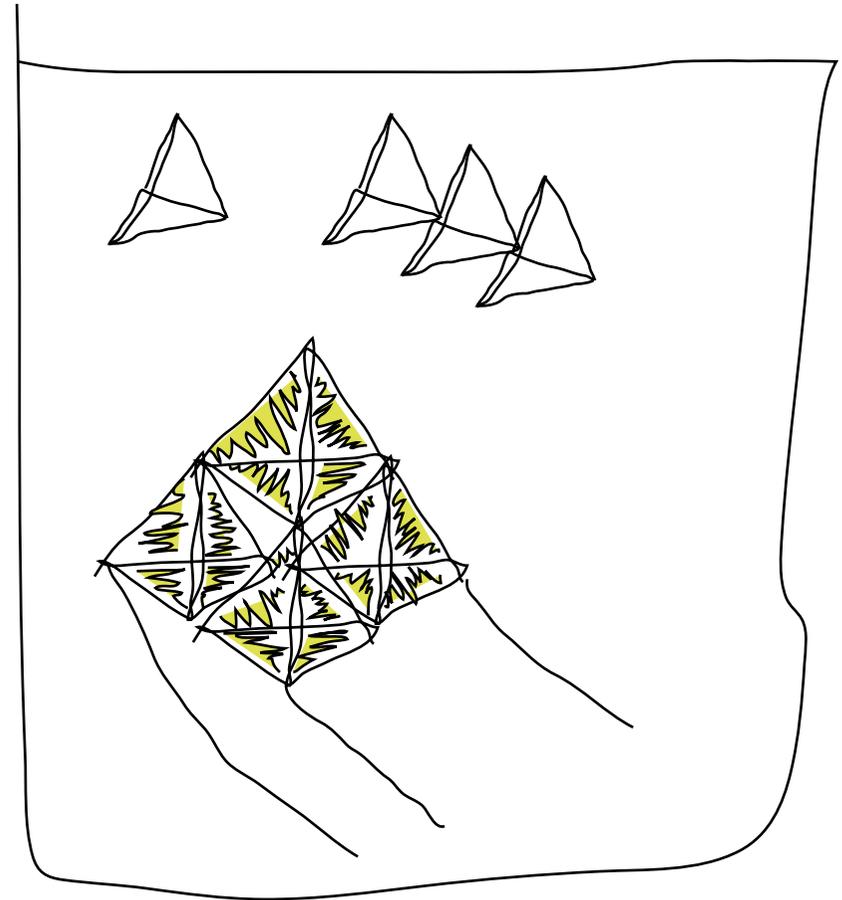
Leoni Fischer

video stills



Our version of the Tetrahedral Kite draws on the weak part of Dr. Bell's concept, the load of the frame. We created a lightweight construction that can be snapped together and fixes the module by its own inner contortion rather than from the edges.

Due to the possibility of 3D printing, many module structures can be produced and connected to the kite textile in a short time. Any Connectors like glue or screws are made obsolete by already including snap-together connections in the print.



Dr. Bell's
Tetrahedral Kite

cooking creepy crawlers



Period **2 Weeks**
one out of two objects

Semester **First**

Where **Bauhaus University Weimar**
2nd prize Food Design Competition 2015

Team **Pauline Temme, Leoni Fischer**

How many flourworms could live on an average cattle farm?

Insects are nutritious and healthy. They contain valuable nutrients such as vitamins and minerals. In fact, an ever-growing world population forces us to reorganize our need for animal proteins. Insects are bio-waste recyclers and easy to breed. In contrast to conventional meat production, hardly any emissions are caused. The „Larva Comb“ is a design which aims to create interest in domicile breeding of edible insects. The breeding box contains a bio-waste compartment, which acts as food storage. Thanks to its modular structure, the box offers the experience of all three stages in the life cycle of a flour worm. An easy handling makes it a fun experience for kids too.

makes a great snack



The first semesters Food Design Exhibiton And Competition made it possible for us to get direct feedback on the overall reaction to bug food and breeding since we had installed the breeding station with living flourworms too.

Cooking with flourworms is fun and simple. Since there aren't many good recipes yet one can freely experiment with different forms and flavours. For the exhibition we made golden roasted flourworms with herbs and chili flakes as well as a sweet option featuring honey and cinnamon.



an open source project



Period **2 Weeks**

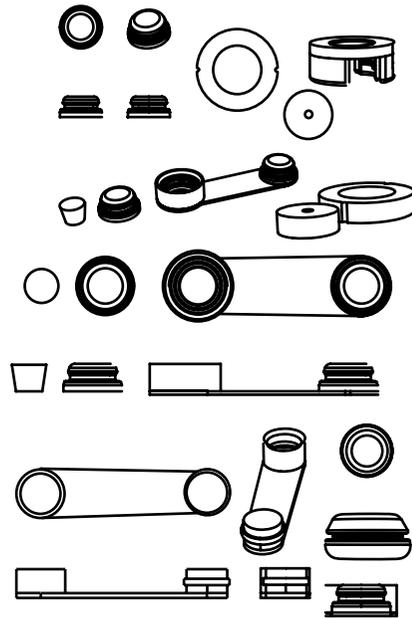
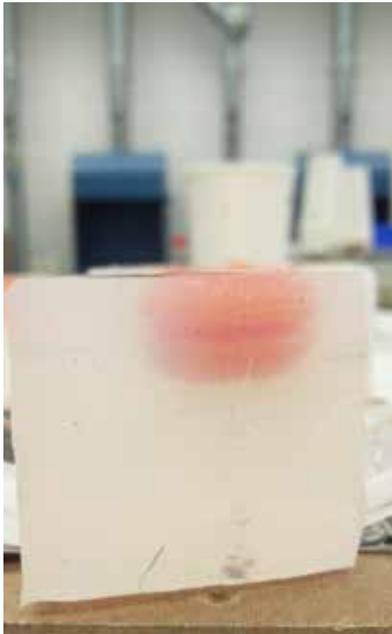
Semester **Second**

Where **Bauhaus University Weimar**

Team **Pauline Temme, Leoni Fischer**

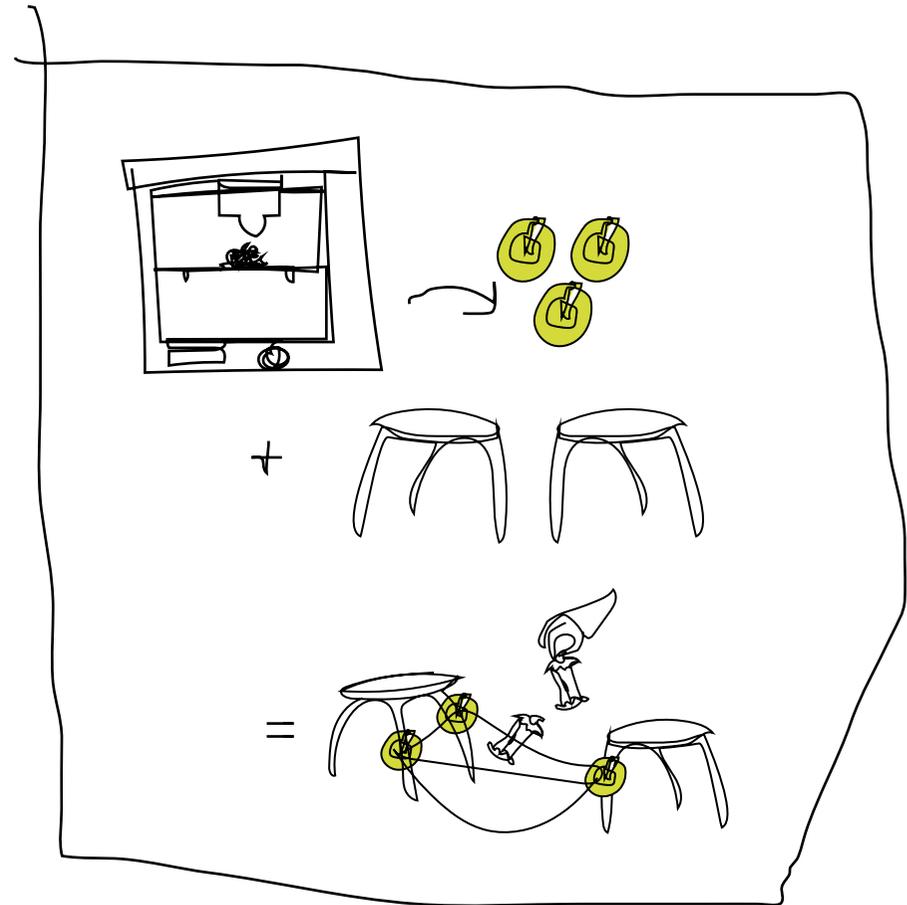
„Druckpunkt“ is a dustbin to print out yourself. A 3D printing file and a bag is all that is needed to replace the traditional trash can - that's how simple it is. „Druckpunkt“ is an open source project to rethink our everyday lives, to make them more flexible and less „full of stuff“.

3d-models →



In the beginning of the project we experimented with various shapes and sizes. The silicon moulds were made by 3D-printing the positive form.

In creative workplaces, which are constantly changing and are characterized by a certain degree of provisory, the little round clip can simply be fixed at any point of the room. Clamping it on table or chair legs makes it easy to form a dustbin by spanning a trash bag between them.



Gropius was not here



Portfolio 2017

Period **2 Weeks**

Semester **First**

Where **Bauhaus University Weimar**

The very first project during my first semester was about designing for a specific place in Weimar place where Gropius had never been. As I looked at the Jakobskirchhof, a tiny old cemetery surrounding Goethes wedding chapel I found it to be a space with a very contemplative and silent atmosphere. In its flexibility, my stool offers a welcome alternative to the park bench by creating the opportunity to settle somewhere in the beautifully quiet and solitary corners throughout the park.

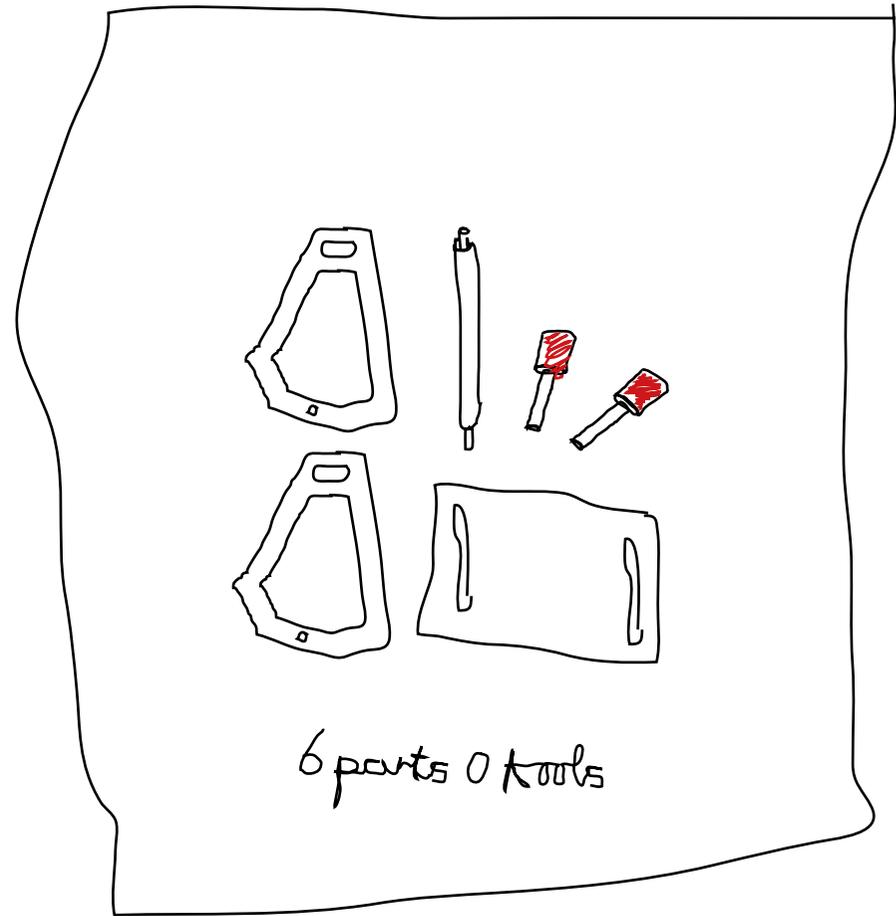
Leoni Fischer

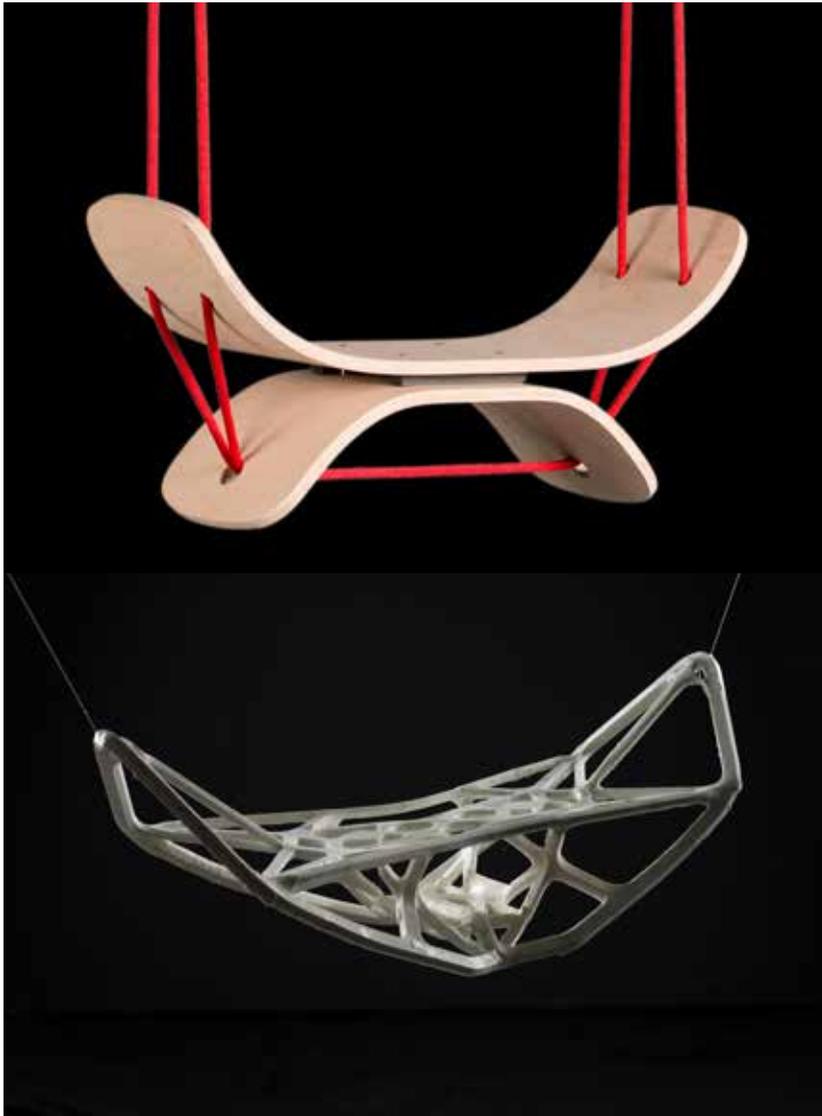
assembled in one
minute

Made from only one material the stool is simply built by CNC-cutting the three big pieces out of wooden boards and lathe the other three parts.



Easily assembled out of a linen backpack the stool can also be carried to other nearby public places such as a playground and the chapel. Inspired by Japanese meditation stools one can switch to a slanted seating position, that straightens the spine and thus makes it more comfortable to sit for a while and contemplate.





Period **2 x 2 Weeks**

Semester **Third**

Where **Bauhaus University Weimar**

www.uni-weimar.de/projekte/nichts-leichter-als-das/de/

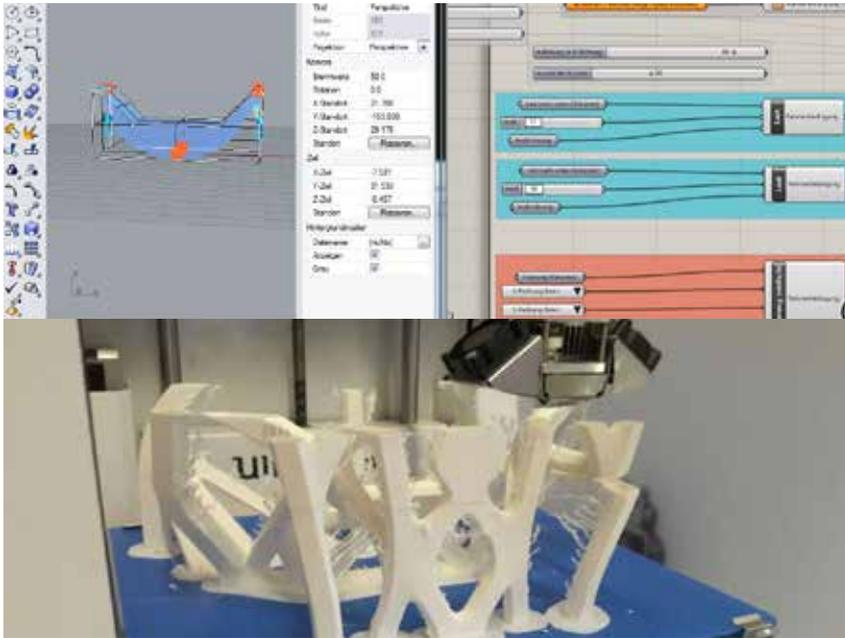
The swing is an interesting design object not only because of its archetypical shape, but also because it contains an extremely interesting load case in the context of the structural optimization method (SKO). Using the Rhino/Grasshopper plugin „Milippede“ I calculated a minimal structure of the swing within the first two weeks. The final result, which I 3D printed in its actual size, was closely linked to the previous calculations. I filled up the hollow 3D print with synthetic resin which turned it into a solid and usable object.



)
link
to
the
project
blog

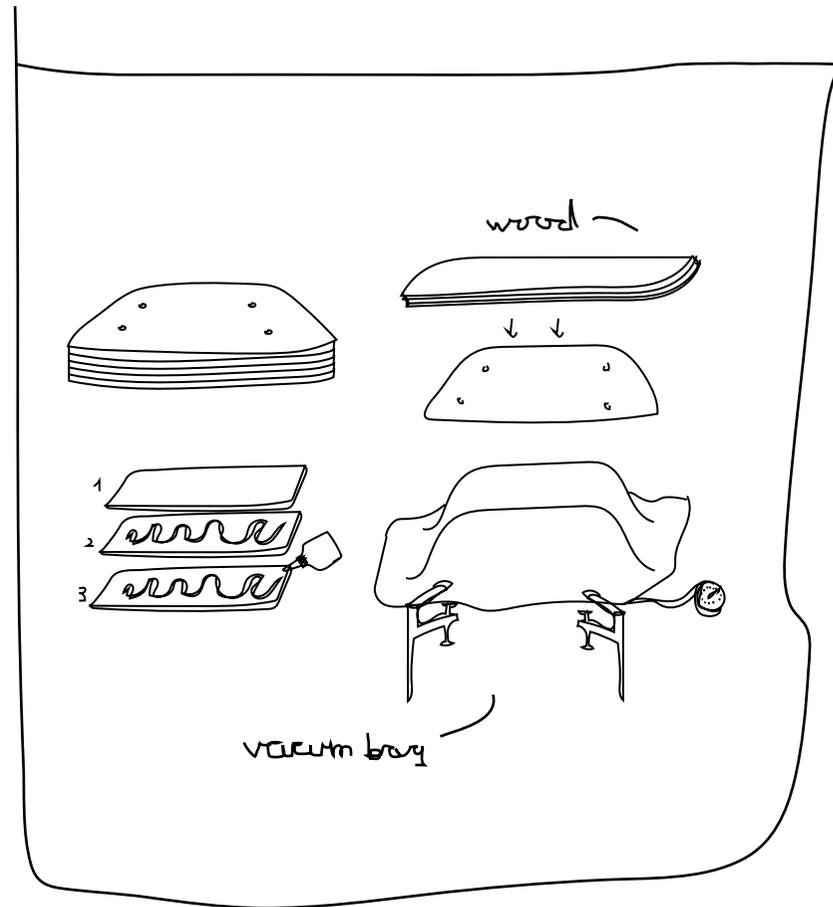
Leoni Fischer

Working with SKO



After calculating the optimized structure I wanted to derive a static principle and abstract the design as much as possible. The wooden swing design is the outcome of these reflections.

The design replaces all tension struts with a rope which passes through the overlapping wooden shells without needing a single knot, thus stabilizing them.



Education

2015 - Present

Bauhaus Universität Weimar
Bachelor of Product Design

2014

German Abitur
St. Ursula Gymnasium Freiburg with an
overall average degree of 1,8
honour of achievement

Skills



| | |
|-----------------------|---|
| German | native |
| English | fluent |
| Spanish + French | basic |
| Adobe Creative Suite | advanced |
| Rhino (+ Grasshopper) | advanced |
| Keyshot: | advanced |
| Microsoft Office | advanced |
| Workshop Experience: | Metal, Wood Synthetics Textiles 3D/4D Printing |

Voluntary Work



„Hurra Hurra“ showing „Feldspat“

2015 - Present

founder of the product design exhibition series „ Hurra Hurra“

exhibition curation, administration

2015 - 2016

Member of the University Gallery
„Marke.6“

curation, administration

2013-2015

Member of „ Kunstgruppe Kubus “

an art collective of young artists who
work and exhibit together. Freiburg Ger-
many (exhibitions 2014 + 2015)

2014

Internship at St. Andrews Episcopal
School New Orleans, USA

Assistance of the Fine Arts teacher.

Work Experience

2016 - Present

head student assistant
Material Archive (MAIA)
Bauhaus University Weimar, Germany

Material Research, Advice, Administration of
the Online Data Base, Exhibition Design

„Bauhaus Student Ambassador“

writing articles, guiding tours, workshops,
presentations at schools and fairs.



Vibraphone Restoration Project

2012 - Present

Musik Gillhaus, Music Store Freiburg

Repairing brass Instruments in the
Metal Workshop, Advicing Clients,
Administration tasks

2014

Dis and Dem Restaurant New Orleans

Barista + Chef
Mural for the outside seating Area