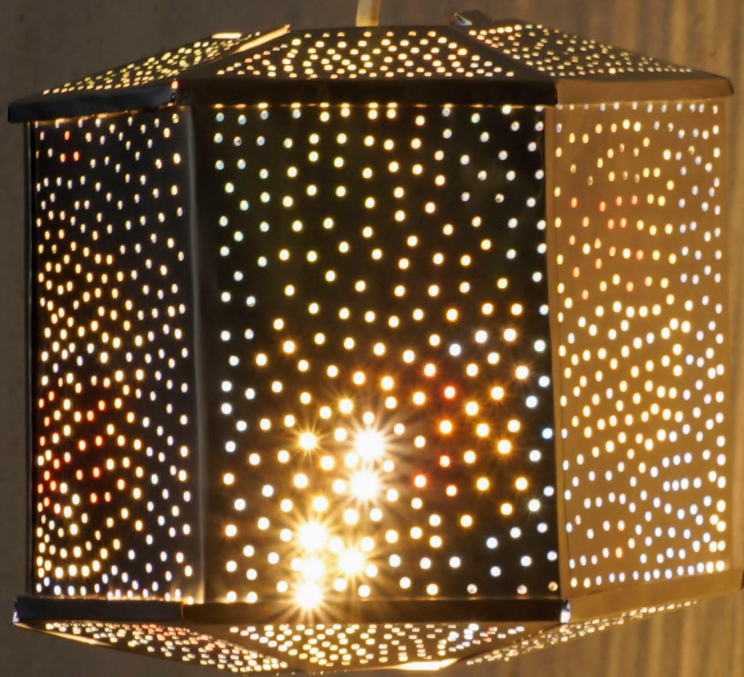


**PORT
OLIO**



Pythagoras



«The warm light of «Pythagoras» shimmers through the hole pattern. It seems as if a multitude of stars were twinkling –a light as if from 1001 nights»

(Luisa Aeberhard, *wohnrevue* 05–20)

Starting point

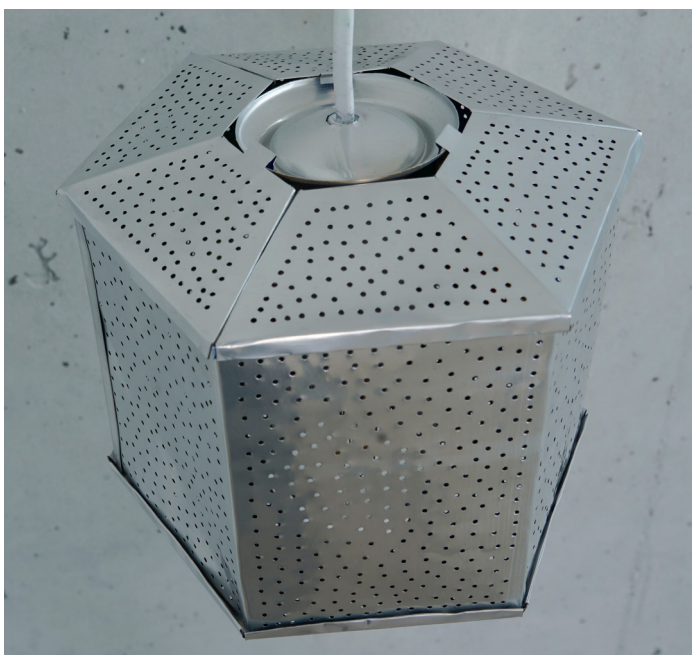
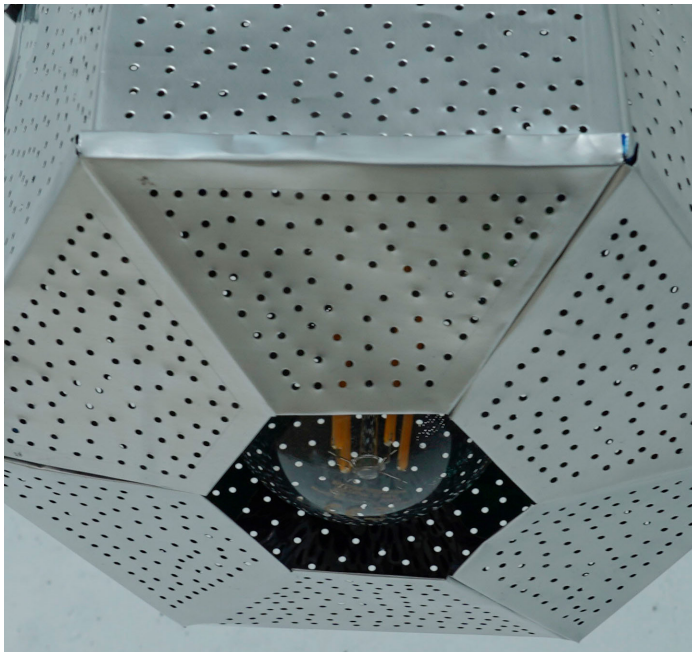
In order to offer a platform to the new generation of designers, the *wohnrevue* launched the section «Die zündende Idee» (the brilliant idea). The task was to design a luminaire with a light bulb and its holder, three meters of cable and CHF 30 for materials. The Pythagoras made a strong impression and was portrayed in the magazine in May 2020.

Inspiration

Whether you see something as waste or material depends on your perspective. In my second home country, Egypt, waste is more visible than in Switzerland, due to the lack of well-functioning waste management systems. Furthermore, Arabic luminaries with their hole patterns and shapes have a unique design, which inspires me. As a high-quality material, aluminum cans with their shiny metallic appearance are reminiscent of Arabic luminaries.

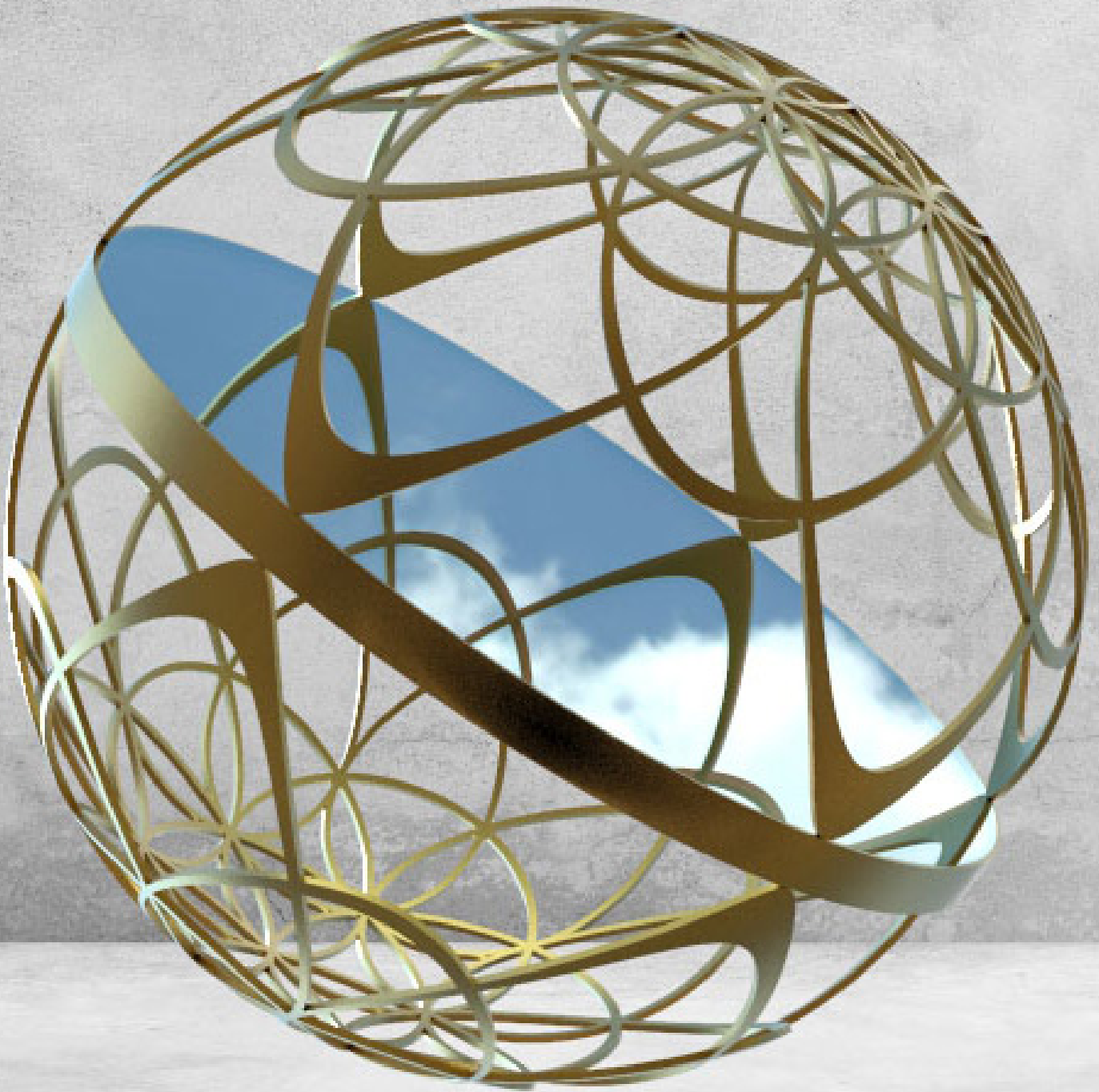
Process

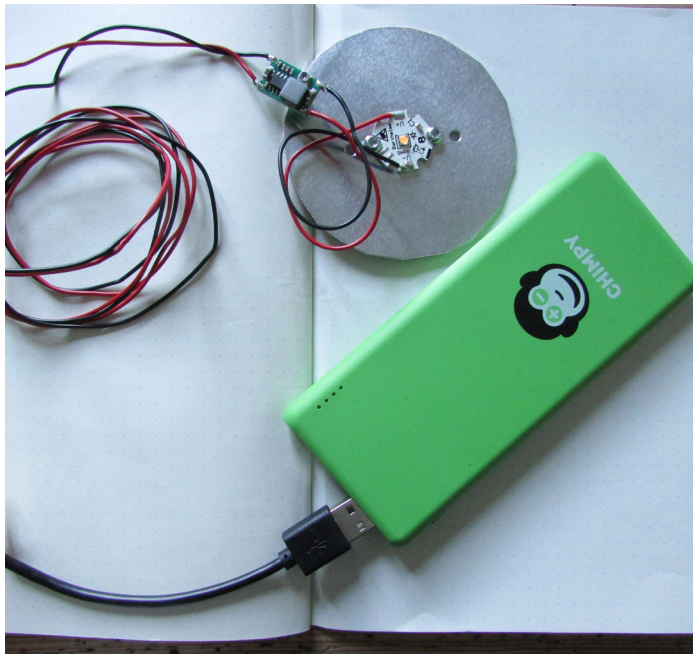
The basis is a six pack of empty beer cans, no further materials. The connections are made using a folding technique. The aim was to restore the value of the waste. The luminaire consists of ten pieces: three center pieces, three bottom ones, three upper ones and a connector to the lamp. To calculate the inclination of the luminaire's top and bottom, I used the Pythagorean theorem. The name «Pythagoras» is derived from the formula $a^2 + b^2 = c^2$.



A very elaborate development process and constant precision work were required to ensure that everything fits together in the end.

Powerblank





How can a luminaire powered by a power bank be interpreted from a sustainable perspective?

Starting point

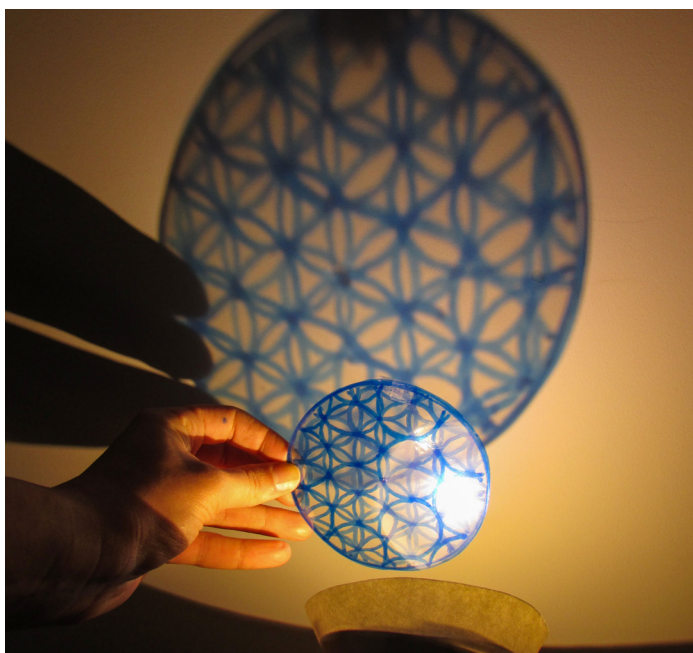
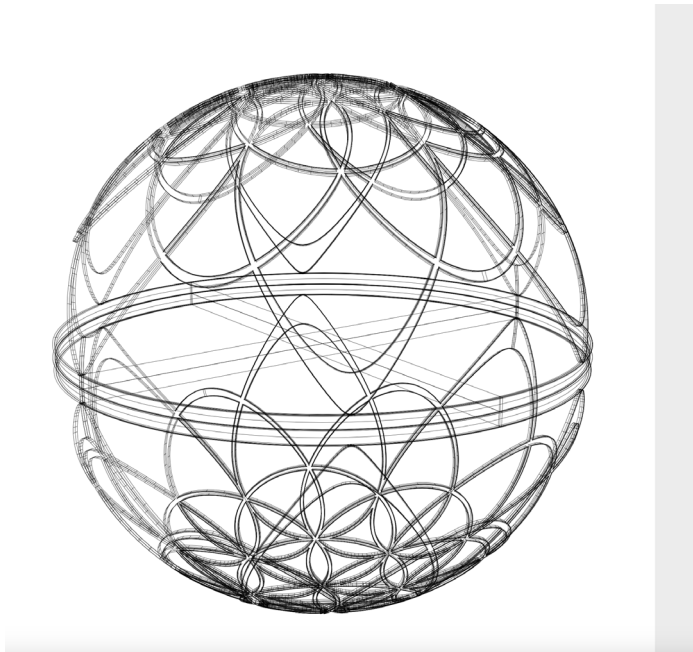
Starting with a provided LED, electronics and a power bank, the task was to design a mobile luminaire. The luminaire should provide an atmospheric light wherever there is no electrical connection and represent a new interpretation of a kerosene lamp or candlelight..

Process

Various test arrangements lead to the definition of the goal of creating a play of light and shadow that radiates coziness. Experimenting with the Moiré Effect, a pattern of circles was found which leads to the desired effect. Research shows that the «flower of life», which is widely spread in spiritual circles, is said to have a harmonizing and energizing effect. It is also said to protect from electro smog.

Interpretation

A power bank implies that electricity is always available, in every place. This stands in complete contrast to conscious, sustainable consumption. Given the background of an environmentally conscious attitude in design, the only consistent interpretation was therefore to do without the power bank and to develop an artistically critical luminaire instead, which addresses this very contradiction. The visualization in CAD shows a metallic sphere with a mirror in its middle. This allows a light-shadow play of the «flower of life» to be projected onto a wall using an existing light source.

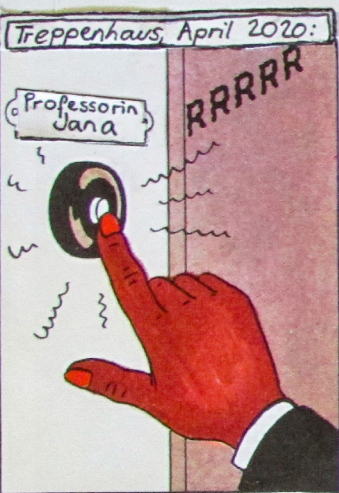


The «flower of life» was reinterpreted in a three-dimensional form.



1

Kosmos Recycle Design



2

3





In view of climate change, design based on used materials instead of raw materials is becoming increasingly important. Accordingly, it makes sense to shift the focus away from the product and towards production for once.

Conceptual

Although recycling and upcycling are sustainable design strategies, they also serve to market products. In order to create orientation in the sustainability jungle, a clarification of terms and quality criteria derived from them is needed. In a written part of my work, I therefore approached the various terms such as Sustainability, Recycling, Upcycling and Recycle Design.



Practical

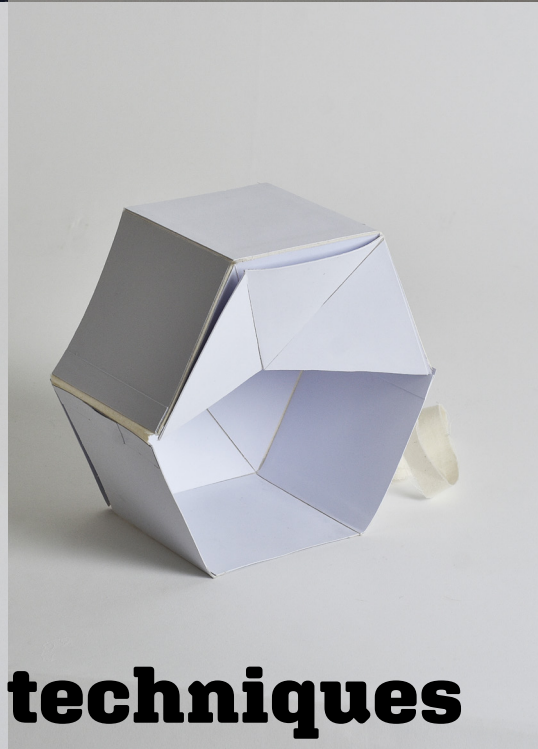
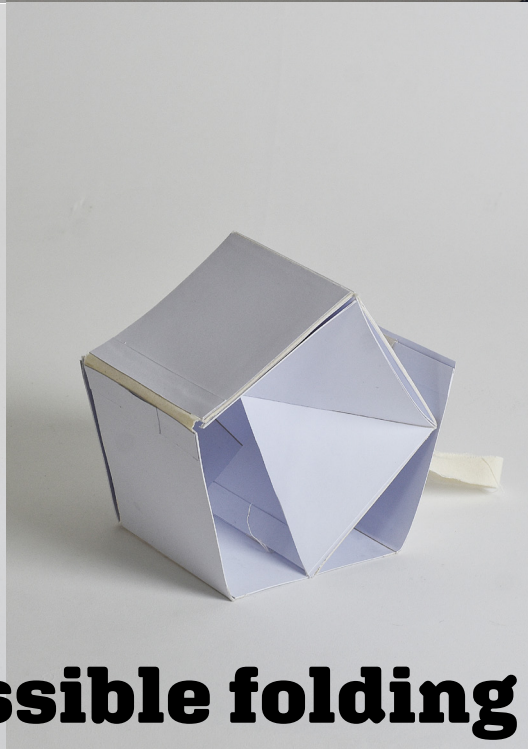
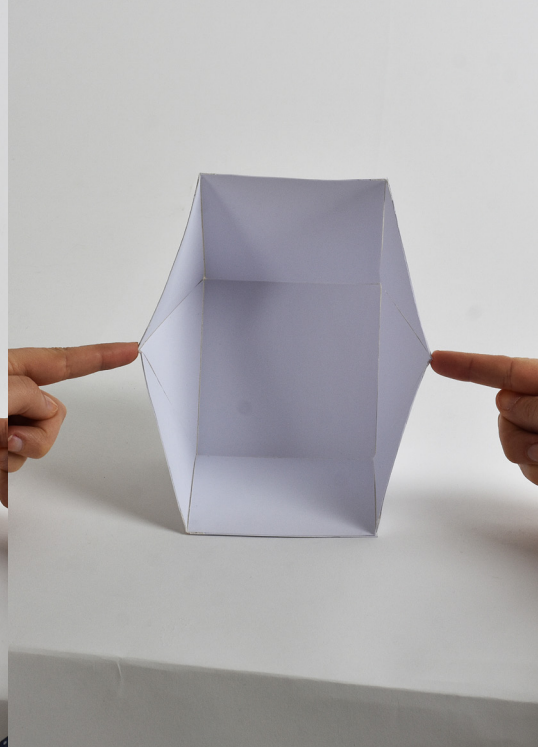
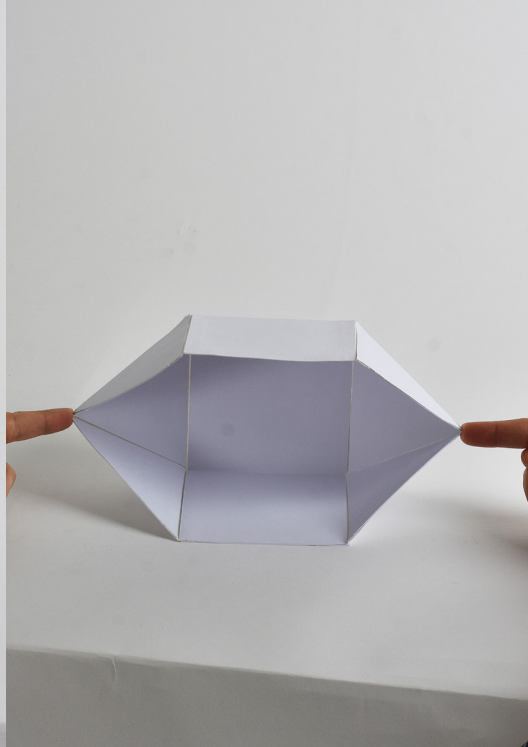
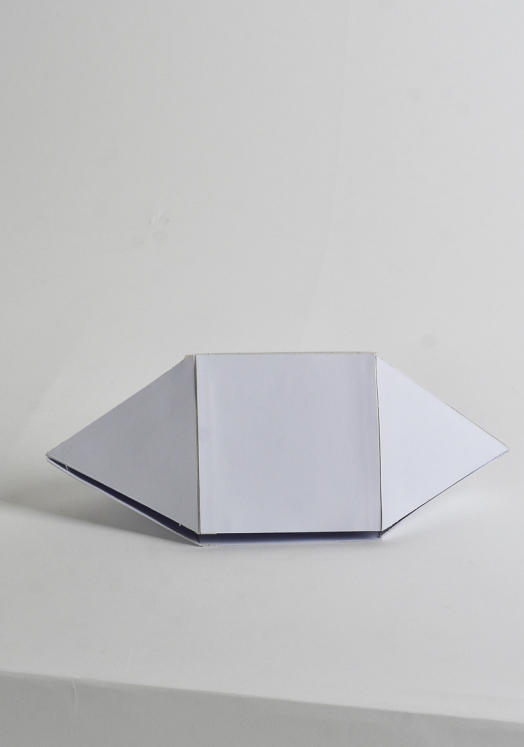
In order to be able to investigate the «Kosmos Recycle Design», an appropriate spatial environment was also to be created: For this purpose, I converted the parking space in the apartment building into a Recycle Design workshop. Within the scope of the interdisciplinary module «Refresh, Rework, Revalue» a solid basis was created for the sustainable establishment and further development of the workshop.



Social

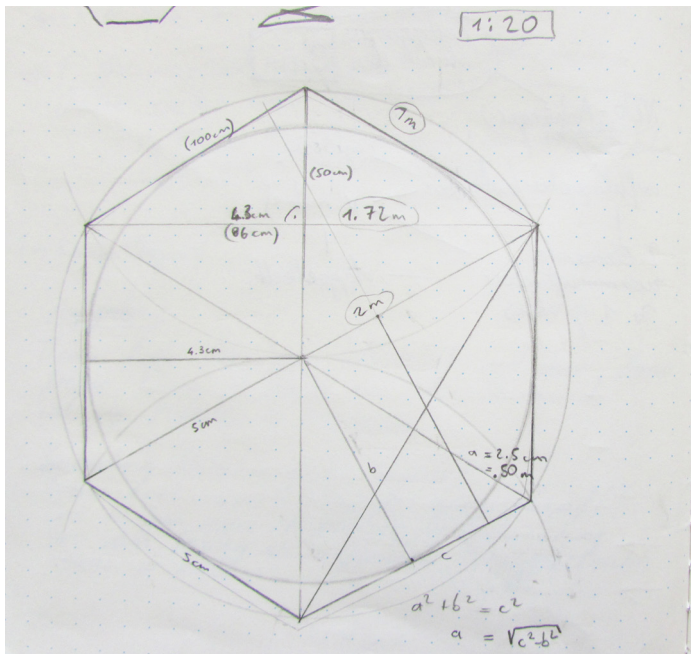
The piece of work is not merely a visible, material result, but consists of a holistic, organic construct, comparable to a social sculpture according to Beuys. Out of respect for the privacy of the neighbors, no personal objects were photographed, and the rooms were portrayed in an empty state. To provide insight into the interpersonal process, I have developed Recycle Design Comics.

Extensive cleaning, tidying out and rearranging has visibly upgraded the room.



**Possible folding techniques
for a mobile space**





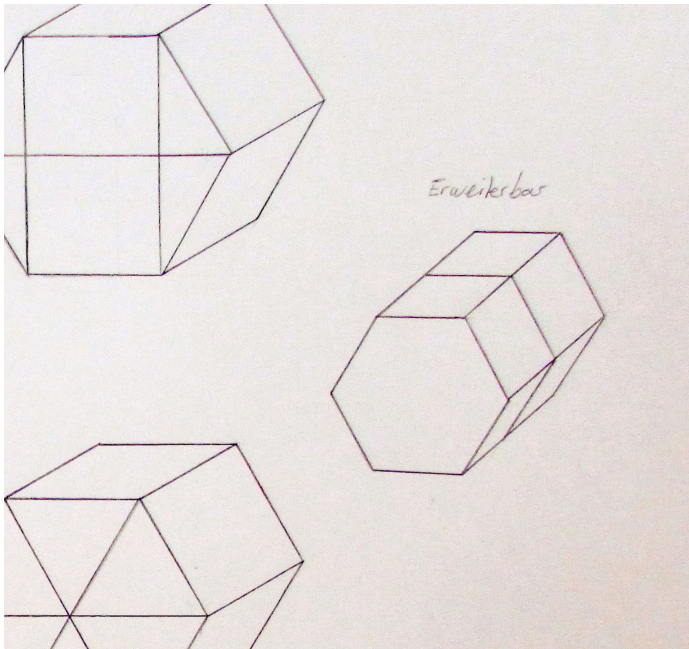
When unfolded, two individual, hexagonal room elements can be joined together to form a larger, honeycomb-shaped living space.

Starting point

While dealing with the issue of space, I explored the question of what contemporary travel might look like given the background of climate crisis. Starting from the idea of moving around without leaving a footprint, the idea of a foldable bicycle camper trailer was developed.

Process

Right at the beginning, the focus of this extensive idea was put on the folding technology of mobile space. The folding elements are solid materials, so that the room can be locked. This creates additional value compared to conventional cycling camping holidays: When folded, the luggage can be safely stowed away in it and when unfolded, the living area is lockable. In contrast to the tent, the aim is not only to be able to lie in the unfolded space but also to be able to stand in it.



Work status

The interim status consists of three possible folding techniques on a scale of 1:10 with their respective advantages and disadvantages with regard to aerodynamics and operability. Together with the detailed process documentation, they serve as a basis for resuming and further developing the work at a later date..



The basic geometric figures triangle and square allow for complex folding techniques.

Verwesung (decomposition)





The hat as a «Wesen» (being) dissolves, what remains is the porcelain, an embodiment of the «trace» the hat has left behind.

Task

For the individual work on the ceramic module, the topic «rotten» was defined. The technical implementation and choice of the clay was up to us.



Idea

The organic materials contained in the clay burn in the oven. I have interpreted this fact as a process of «decomposition» or «rotting». The organic object dissolves during decomposition. What remains? Is there a «Wesen» that can be captured? The aim of this work was to embody this process of decomposition. The lifespan of objects is a topic that concerns me in object design also from a sustainable perspective.

Implementation

The basis for the organic object is a felt hat. The hat is also symbolic for the «Wesen». The felt hat was brushed with porcelain casting compound, a multi-layered, long, and protracted process. Glazed on the outside, the inside of the hat was left untreated so that the «trace» of the object could be seen unaltered. What remains after the burning process is a «trace» embodied in the porcelain that the hat has left behind.



The porcelain casting compound was applied layer by layer.

ТЯОЧ
FOLIO