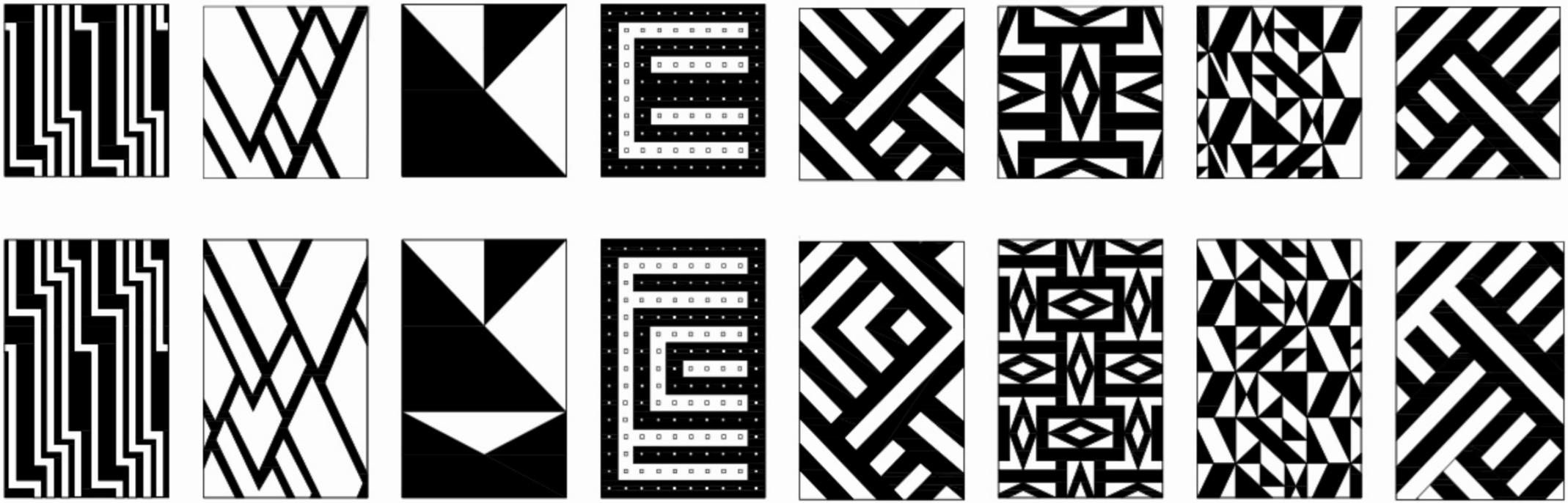
MODEL MAKING WORKSHOP

WS 20|21

MAIK - Innenarchitektur & visuelle Kommunikation
with Armor Gutiérrez Rivas & Rosa Rogina

CONTENT



TIMETRAVEL

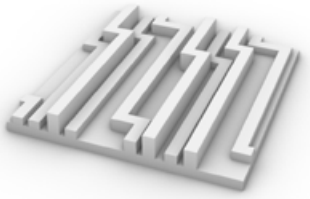
#backintothefuture
#viennesehistory
#futuristicdesign

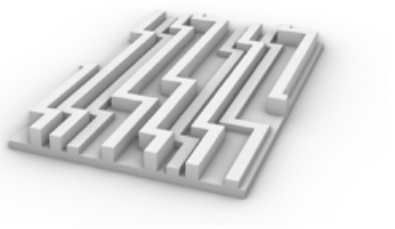
Original pattern: Josef Hoffmann fabric for the Wiener Werkstätte 1928
The chosen pattern is organized in steps, which are different in length and depth, and form a rapport that is not quite visible at first sight. As we were working and analysing the pattern further, we found that it can be seen as very contemporary and modern.

It reminded us of very futuristic objects, like a printed circuit board. To bring this contemporary look into prominence, we extracted the lines into different heights. In the original draft of Josef Hoffmann, the pattern is colored in black and white. We imagined the black fields as shadows and the white ones as 3-dimensional shapes. This concept led us to the way we extruded the lines.

For the first jasmonite-model we used plain simple colors in order to let the pattern speak for itself. For the paraffin-model we used crushed coffee-beans to reference the traditional viennese coffeehouse-culture. The clay leftovers to are supposed to remind the viewer of the ceramic craftsmanship of the Wiener Werkstätte.

Due to the hights we chose for single elements of the tile and the pattern it self, the design would ideally function as a sound absorber. For example at restaurants, bars, cafés, night clubs or sound recording studios.





Sophia Buchmüller | Melissa Muthsam

CITY LIFE IN STRUCTURE

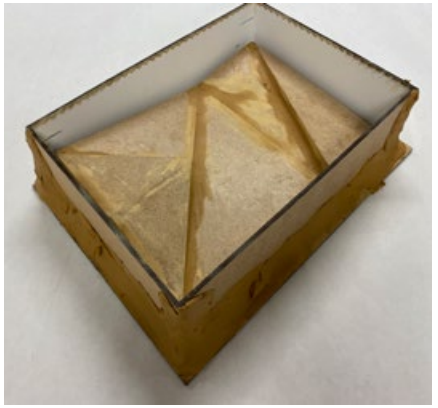
#gridlikeacity
#extrusionintrusion
#urbanism

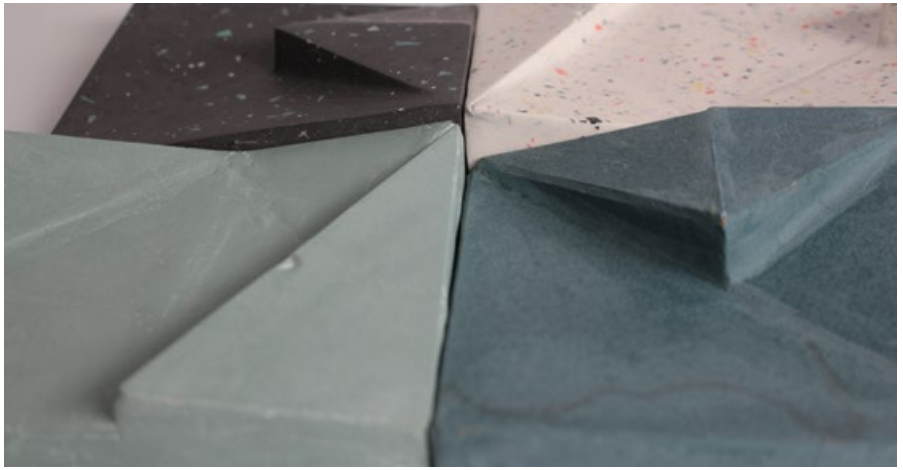
The pattern was created by Josef Hoffmann and the date of creation is not given. We decided to use this pattern because of its vivacity which is achieved through polygons and rectangles in different sizes. Yet there are parallel lines which create order. The arrangement of the different forms makes the pattern very interesting.
It reminds us very much of the view from a busy city from above.

The city of Mannheim, also called „city of squares ", is one of the oldest cities to have streets in straight angles which were created after elector Friedrich IV. decided in 1606, that the city should have a better military character. Also, the map of New York City was an inspiration with the skyscrapers and the grid system of the streets.

Our aim was to give the pattern of Hoffmann a more urban look by creating polygons of different heights. We decided to give also the grid a height, because it connects visually the whole pattern and thus the two tiles. In the big tile, the polygons are extruded and look like houses, which are coming out of the street. In the small tile, the grid is extruded, like showing the way of the street through the city and giving remembrance to Le Corbusier's city models.

Through adding a third dimension, the pattern´s beauty definitely was enhanced. We believe that the urban character comes out more and that it created a very elegant look by not going to far up or down with the possibilities of height.





Hannah Dittrich | Leonie Georgopoulos

TILTED TRIANGLE

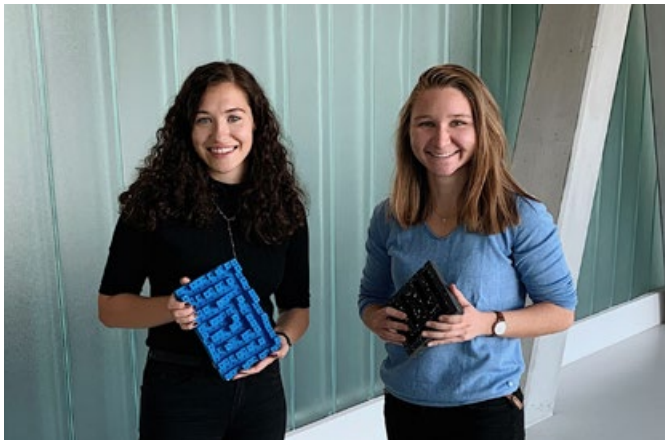
#circulareconomy
#acousticdesign
#edgesandinclinations

Josef Hoffmann's Z100 pattern was the starting off point of this project. When analyzing the pattern it can be divided in several basic elements and we decided to choose the unit composed of four triangles due to its simplicity. By extruding and inclining the black and white triangles a three-dimensionality is achieved. When arranging the tiles together, the dynamic shapes offer smooth transitions from one tile to the other. Additionally, an interesting play of shadows is created.

The tiles create an impressive structure in interiors as well as on facades. The play of angles facilitates beneficial acoustics for any interior setting which can be noticed especially in concert halls. The Elbphilharmonie building in Hamburg by Herzog & de Meuron is a reference which demonstrates how to use the tiles not only as a practical element but also as a design statement.

The main focus of this project is to reuse waste products from the workshop space and applying them in a new context. Thus the product life cycle is prolonged and the philosophy of circular economy is executed. For instance, the leftover Jesmonite is crashed and used as terrazzo chips for new tiles. Furthermore, access metal waste products are encapsulated in Paraffin and create a sharp contrast to the translucent material. When backlighting these tiles the play of polished and matt properties of the metal cuttings and Paraffin are emphasized.

The project exemplifies how waste products mixed with new materials can be reused to create a variety of tiles. The simple yet strong shape makes them a versatile piece for any setting.



Bianca Gangl | Sophie Kuhn

THE LABYRINTH OF WIENER WERKSTÄTTE

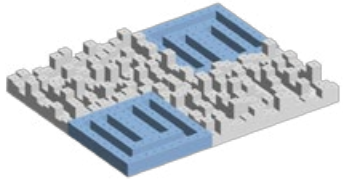
#gridpattern
#wienerwerkstätte
#exploremateriality

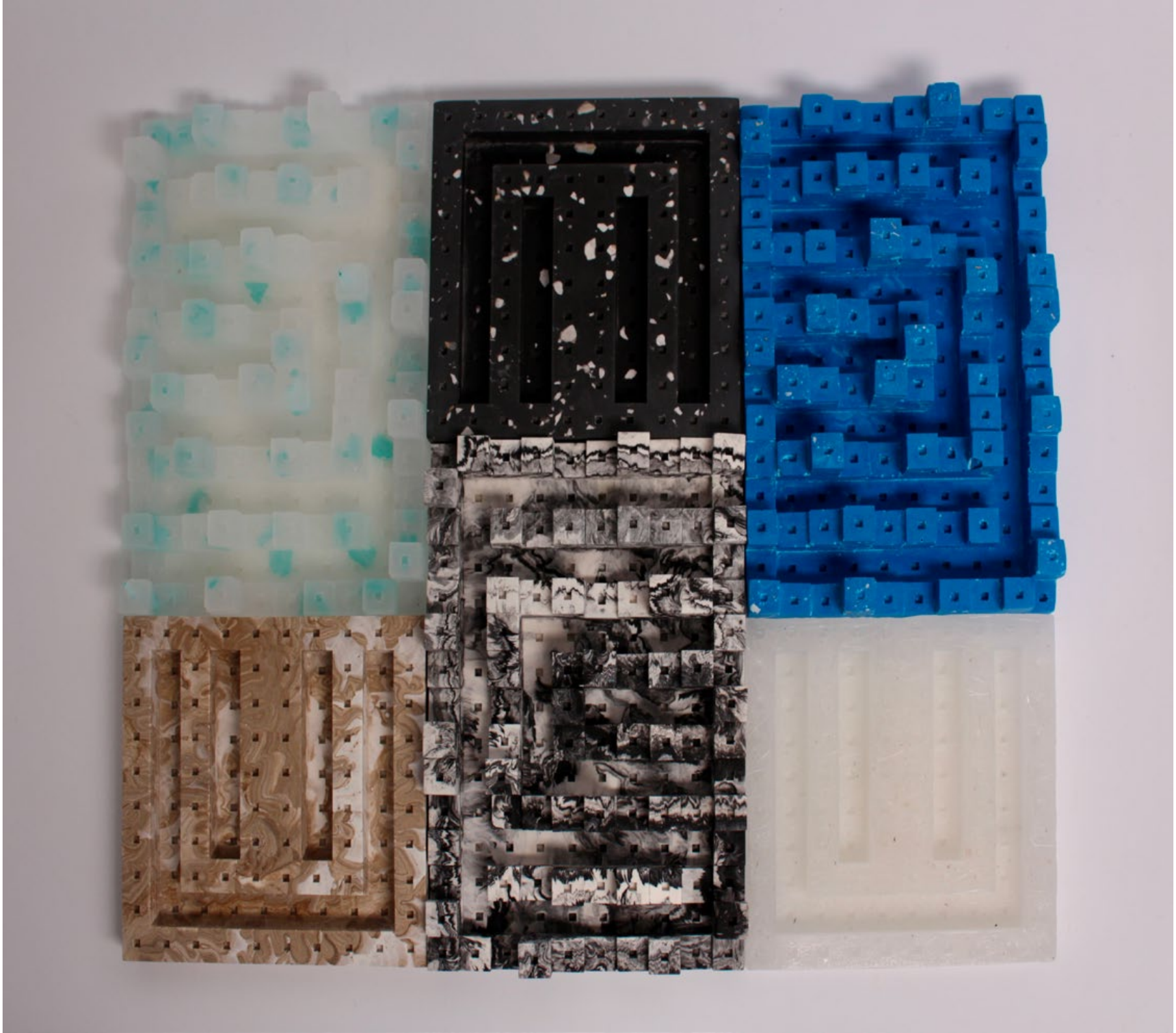
We chose our pattern because of the fact, that when you look at it from the top, on the first sight, it looks like a part of a labyrinth. When we added the third dimension it becomes even more labyrinth look-alike. This pattern was created by Joseph Hoffmann und originally this pattern was meant to be a surface design.

When it comes to adding a third dimension the way Josef Hoffmann uses the grid within his designs is relevant for our project. Therefore, we wanted to apply this grid also on our pattern, which we changed a little bit to show also in 2D that this is our own new interpretation of the existing pattern. Our references are the facade of “Postsparkasse”, which is a building of the time as Wiener Werkstätte used to be famous. This grid can clearly be seen when you look at the facade and as well when you look at our chosen patter from the top view.

Furthermore, our 3D designs also aim to contrast each other in terms of a variety of heights. Whereas one the model shows just two different hights the other one has many different heights. We decided to do so, because this effect references the labyrinth we noticed when we looked at Hoffmann´s original pattern for the first time.

Our tiles can be used as ceiling or wall design to add value and aesthetics to a room. In addition the small squares of our tile can have a positive effect on the acoustics. Therefore, the tiles can function as sound absorbing material. Because of the two different ways of applying heights the two variations of the tiles show different characteristics in terms of absorbing sound.





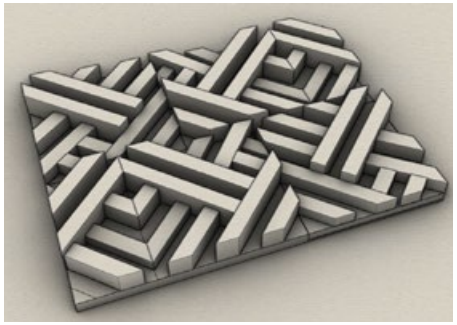
TILE THE KNOT

#tiletheknot
#urbanknot
#physicalspace

This pattern belongs to Josef Hoffmann's Surface pattern designs between 1902–1905. Thepattern was drawn on a checkered paper. The primary grid is square and consists of 20x20.As seen in the illustration, sketches are in black and white. In this pattern, it draws adiagonal division into the base square of 20 units. The center diagonal consists of steppedstrips rotated 90 degrees based on 45 degrees in central diagonal. The pattern aligns withdistances of 3 or 1.5 units.

We associate this pattern with a knot. When adding individual heights to the model, thesimple shape gets more interesting to look at. By connecting the two sizes of the tiles youget the impression of an endless path. The short and the long strips symbolize each roperoad, which gives the pattern a more urban feeling. The height differences create gradientshadows, which end up leaving a playful environment surrounded by a palette of greys.

Although we continued the pattern of the big tile individually, they still fit together. They workin this size as well as scaled up, in which case it could be experienced as a physical space(e.g. Holocaust monument in Berlin) Still we see the use of them as a decoration for theceiling, which also might have an acoustic purpose.



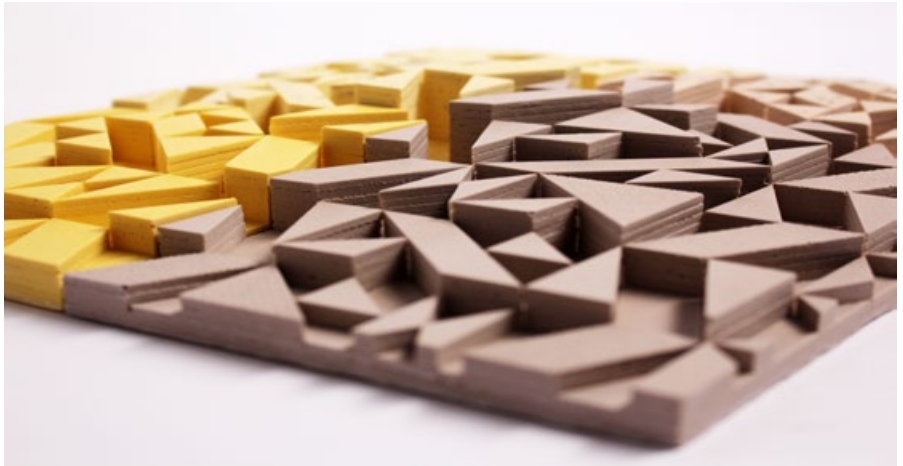
THE THREE DIMENSIONAL FABRIC

#magnifyingglass
#labyrinth
#intertwinedflowers

The pattern we have chosen was developed by Josef Hoffmann in 1909 as a fabric print. It was used and designed atthe “Wiener Werkstätte”.

Originally,it is a pattern developed in two dimensions, but in our case it develops into a field of surfaces that extend into three dimensions. This creates the impression of an inverted labyrinth that makes itsway over the tiles, thus continuingon into infinity. The alignment of the patternis interruptedby the smaller tiles that can be placed between the larger ones. They do not only protrude above the others but also catch your eye, like when you look for the right way with a magnifying glass. This also results in two patterns that have the same origin but develop from the centre in a different direction, like flowers that intertwine.

Through the play between elevations and depressions and the shadow that is created, the design not only develops a flow in the horizontal but also a design with the possibility of expanding vertically. As a provider of shade on a facade, this pattern offers protection from the sun,just like the fabric in its original use.



Lisa Hirsch | Viola Kryza

HOLISM

#josefhoffmann
#totalworkofart
#artisticarchitecturalpattern

Z100 is a surface pattern made by Josef Hoffmann. Hoffmann created it with pencil and black ink on a squared high size DIN A4 paper. The Paper is dateless (Hoffmann, Noever, 1987).

Z100 seems at the first glance very intense. For the reader of Z100 it is unknown where to look first. The pattern is formed by various individual units, but it is formulated by a clear functional system. This perception was our reason for choosing this pattern.

First, we have not seen the pattern in a black-white contrast, but rather in a composition of pathways. So, we saw an architectural connection in Hoffmann's artistic pattern. Hoffmann pursued the concept of the Gesamtkunstwerk („total art of work"), where every single element of an setting was designed as an holistic part of an integral whole (Fahr-Becker, 2015). We have set ourselves the task to recreate Hofmann's pattern as a new Gesamtkunstwerk and put it into an architectural context. Our intense is to follow Hoffmann's squared base and define the size of one given unit with 0.5cm. It is important to us to create a cohesion between the single parts and have chosen the arrangement of the sections to form a united centre. The third dimension is our parameter to create a clear connection to all associated parts and to make the total work of art more readable. The tile elements can be put together endlessly, which creates a hilly landscape, where several centres arise. This composition of various centres and hilly topography can be set in a larger scale in an urban context as an architectural masterplan of a city. We see our composition as acoustic elements, as well vertical as horizontal, room installations or separations, wall cladding, door elements, seating elements, furniture, facade designs, open space installations, or as garden and landscape design.

This composition can be set in an architectural and an artistic context, and revived Hoffmann's ambition of a Gesamtkunstwerk.

THE MAZE

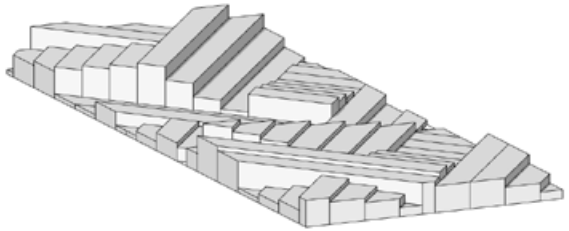
#getlost
#themaze
staircasemaze

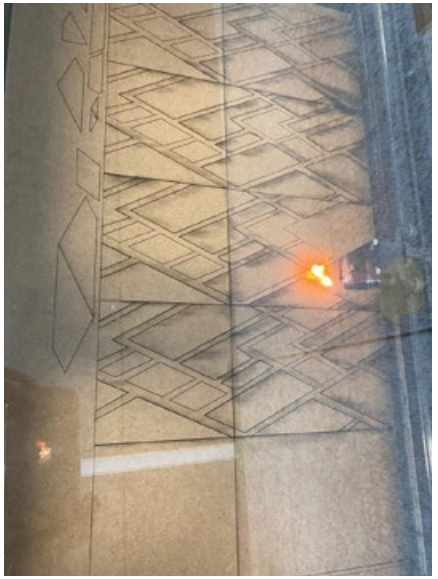
The pattern “Flächenmuster II” from Josef Hoffmann was chosen because it invited us to make a playful experiment. The idea was to turn the 2-dimensional print into a small 3-dimensional staircase maze, which also takes a normally horizontal element and turns it into a vertical one if you put the tile on a wall.

In this maze people can get lost and find themselves in the different heights, colors and even surfaces since some are rougher or less even than others. The different surface textures invite the observer into this unique experience. Feeling the contrast between the rough edges and the smooth surface allows us to not only admire the objects’ aesthetic design but also get involved on an emotional level. Engaging with the tile tactually reveals the hidden elements that are not visible by only looking at it. Those elements include a crater-like variance in height.

In addition to this, the tiles would work together when placed next to each other as an extent of the staircase maze and adding new materials and experiences to it sinceeach of the pairs has different ingredients adding changes in texture.

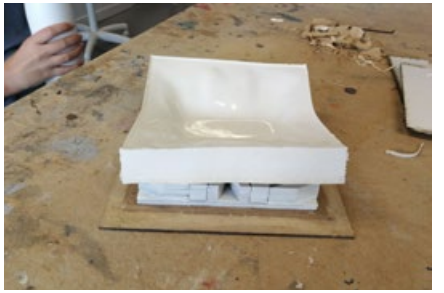
Hoffmann’s original tile design has proven to be a productive blueprintfor our contemporary and playful interpretation.

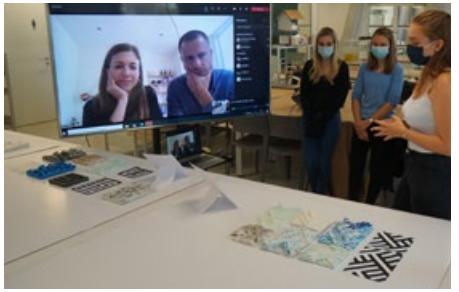




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