

## **GROUP 3**

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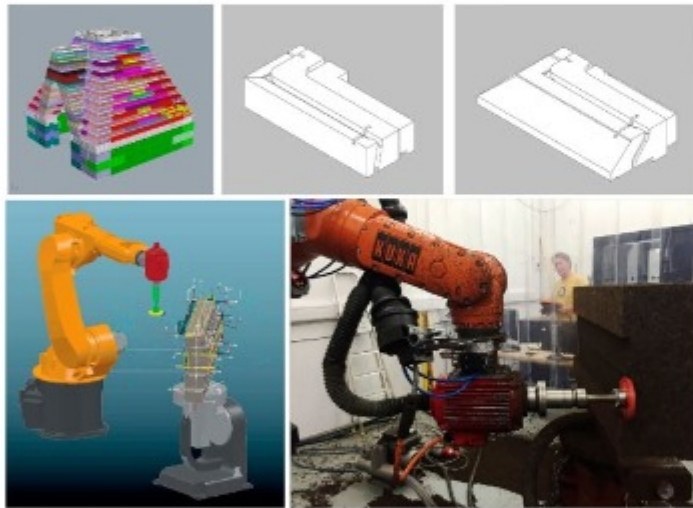
ZOFIA SOŚNIERZ

# **URBAN FURNITURE INITIAL IDEAS**

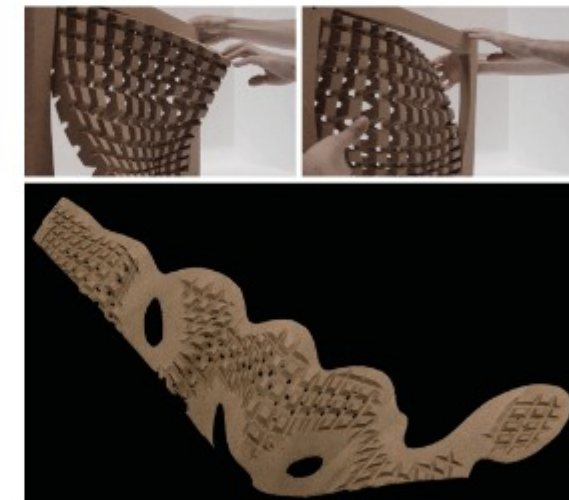
# MATERIAL

## wood based biopolymers

Wood is perhaps one of the oldest biomaterials in commercial production. Bio-based polymers extracted from wood, such as lignin or cellulose, are in demand in the specialty chemicals and composite materials market. More recently, startups are exploring the possibilities of supplementing wood with other biopolymers to create augmented wood. It is weather-proof, more fire-resistant, and much stronger. This makes it suitable for different applications in the automotive and construction sectors.



robotically milled cork



## DESIGN AND ROBOTIC PRODUCTION

- milled cork
- 3d printed composites



# STREET INSTALLATIONS

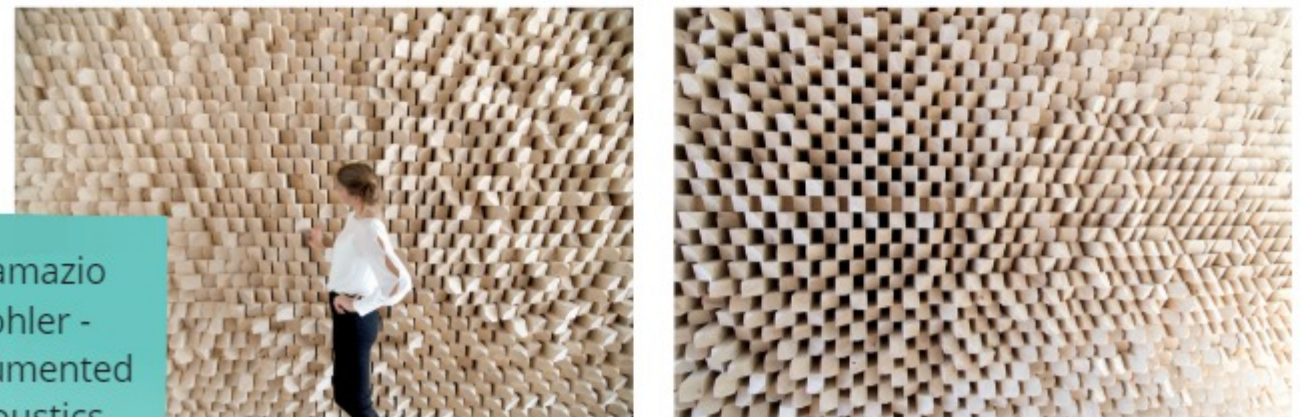


- way finding
- information
- illumination/lighting adjustment
- opening/closing the structure according to climate/environmental changes
- opening/closing the structure according to users needs

# MATERIAL



Kinetic  
movement



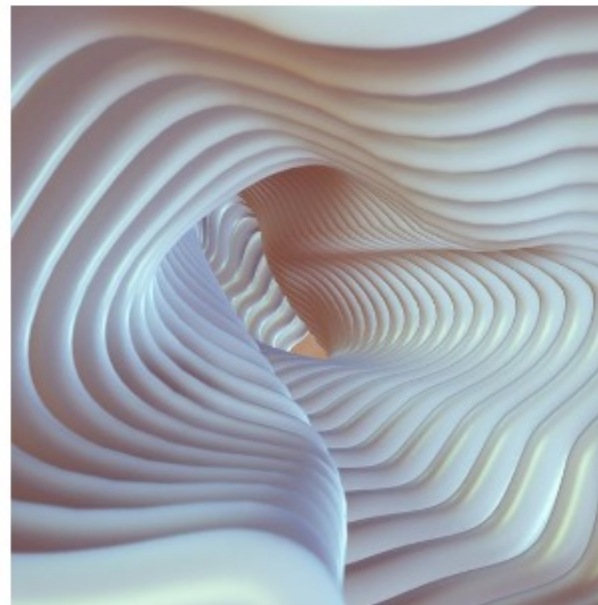
Gramazio  
Kohler -  
Augumented  
Acoustics

## USEFUL LINKS:

- <https://www.icd.uni-stuttgart.de/projects/>
- <https://www.gramaziokohler.arch.ethz.ch/web/d/projekte/index.html>

# PARAMETRIC SHADING

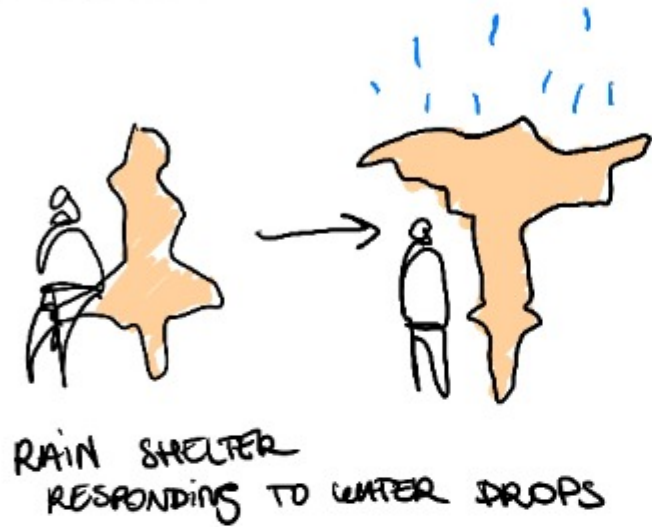
INTERACTIVE ROOFING OVER STREETS- Opening Dependent on the rain/sun



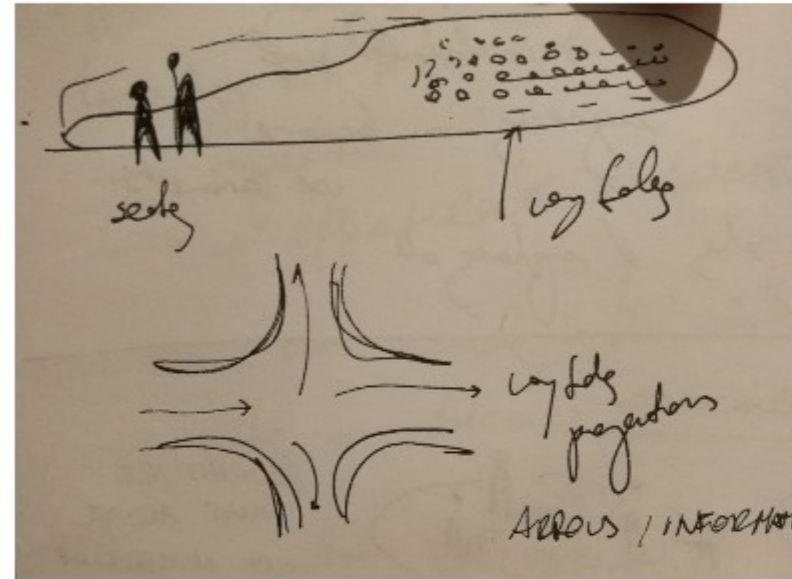
# IDEAS

## RAIN SHELTER

### 1:1 PROTOTYPE ARCHITECTURE

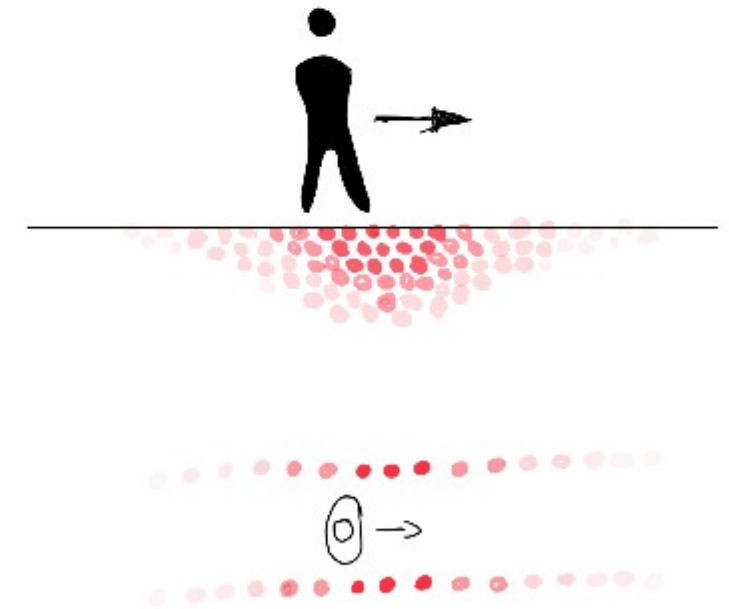
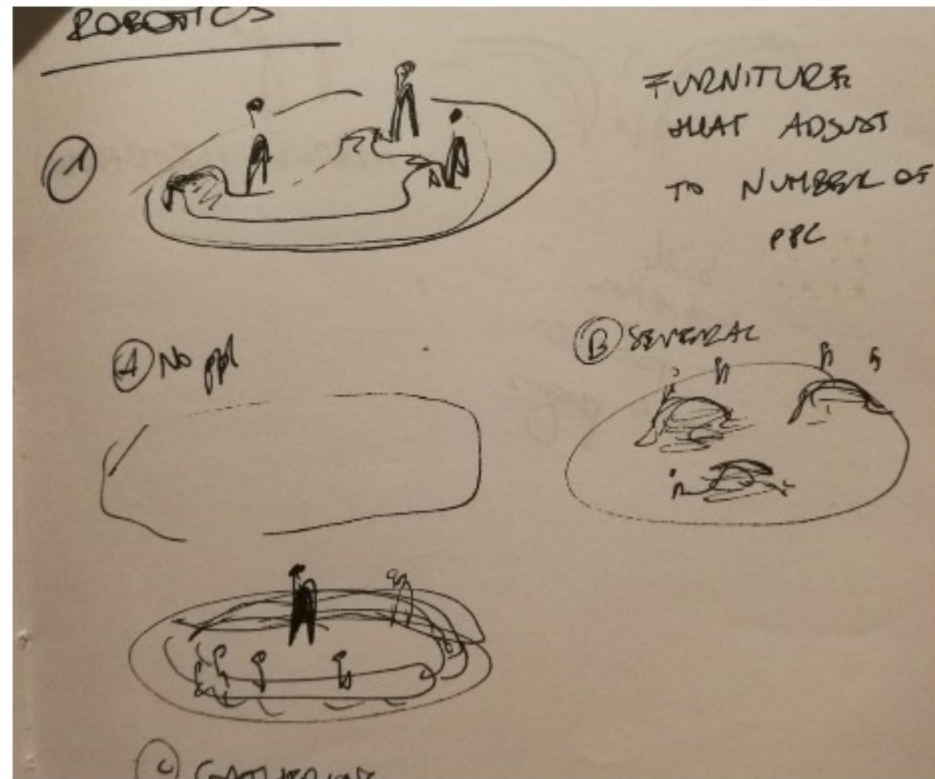


## URBAN FURNITURE AND WAY FINDING



PRESSURE-BASED RESPONSIVE  
PATH ILLUMINATION

## TRANSFORMATIVE PLAZA



# CONCEPT DIRECTION

IDEA FOR  
CREATING  
A BEEHIVE!



BIODIVERSITY  
AND RESTORING  
ECOSYSTEMS AND  
BRINGING  
NATURE TO THE  
CITY