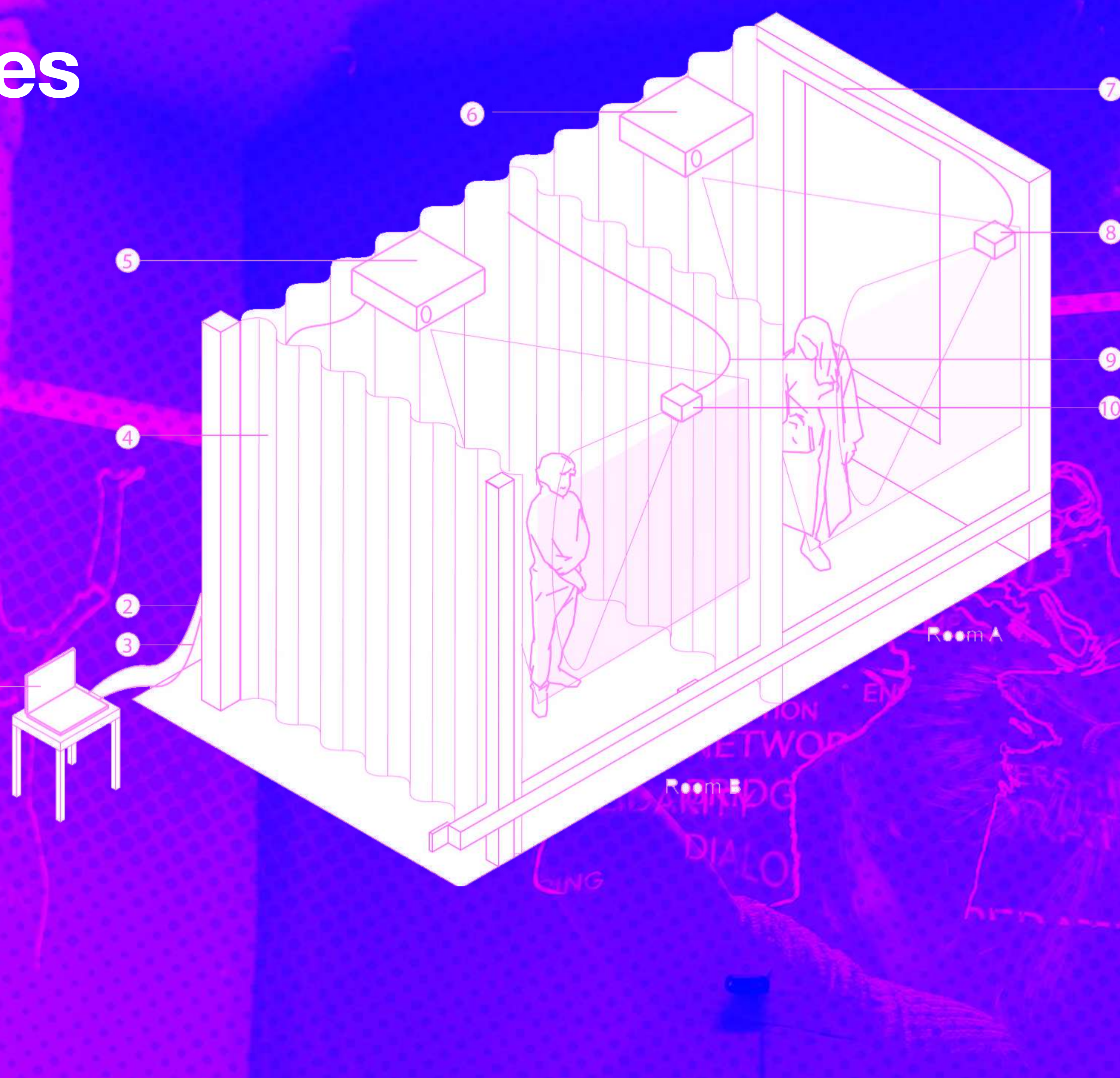


Malleable Boundaries

Teammate: Mariia Pogodaeva

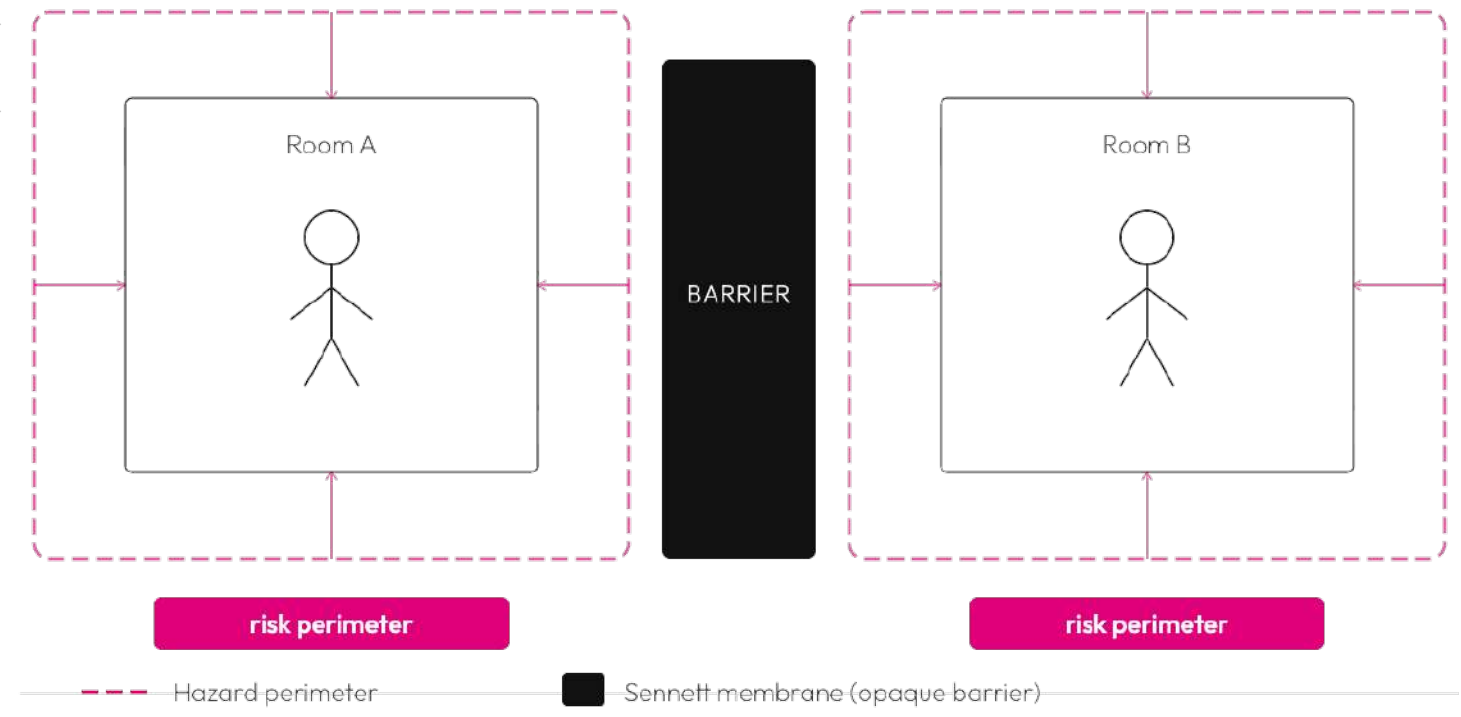
Instructors: Prof. Dr. Reinhard König,
Dr. Sven Schneider, Dr. Martin Bielik,
M.Sc. Iuliia Osintseva, M.Sc. Egor Gavrilov,
M.Sc. Egor Gaydukov
Bauhaus Universität Weimar | Summer 2024



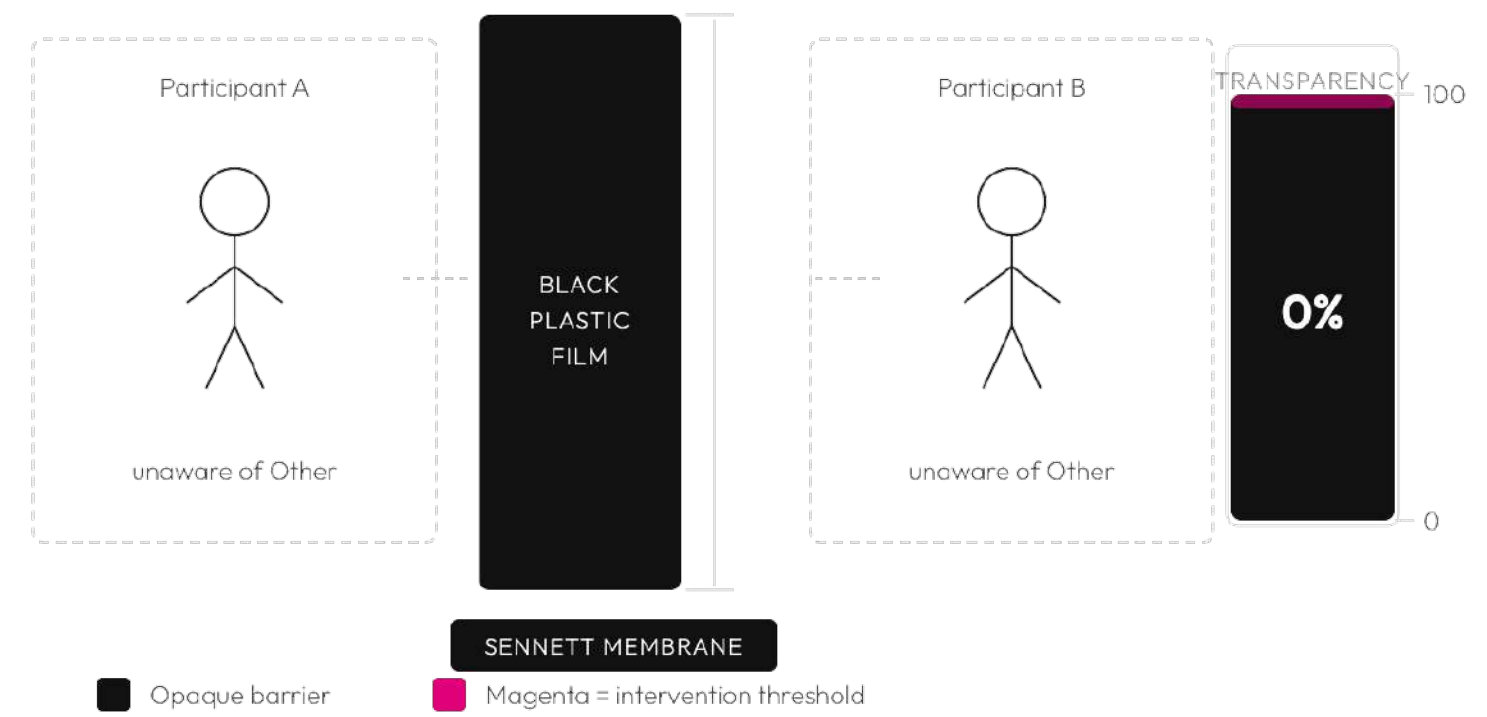
Malleable Boundaries



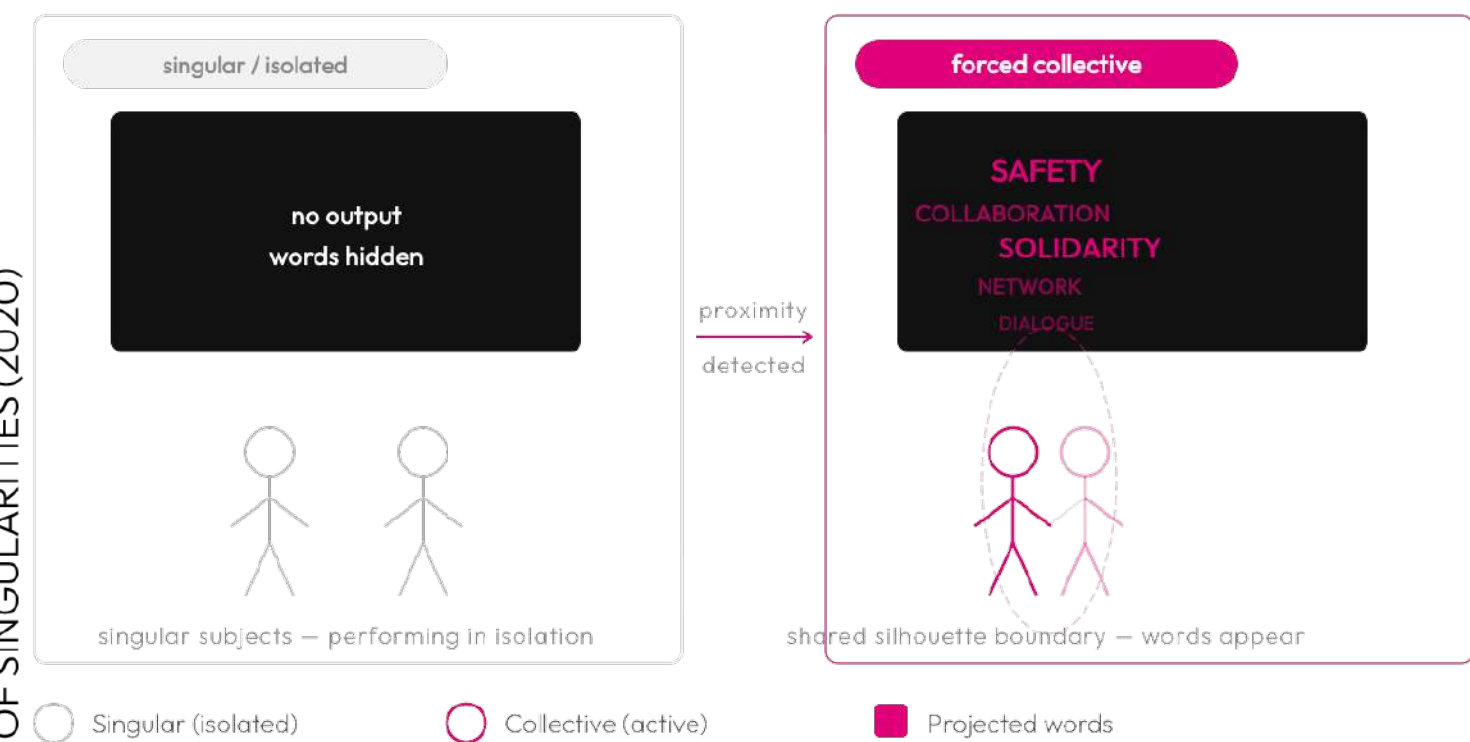
The architecture of precaution
ULRICH BECK — RISK SOCIETY (1992)



Materializing the passive city
RICHARD SENNETT — THE FALL OF PUBLIC MAN (1977)



Breaking the singular bubble
ANDREAS RECKWITZ — THE SOCIETY OF SINGULARITIES (2020)



Slime Mold Simulation

Link: https://ai.studio/apps/drive/1NOq6fjl_wn-tZZwlc_gODzbdJb_K1LuZ?fullscreenApplet=true

Other Projects

1. PlayPeak

Digital Fabrication & Prototyping
 Teammates: Berkutay Coşkun, Sümeyye Isbilir
 Instructor: Assist. Dr. A. Kumsal Şen Bayram
 İstanbul Technical University

Flowchart - Outlining The Process

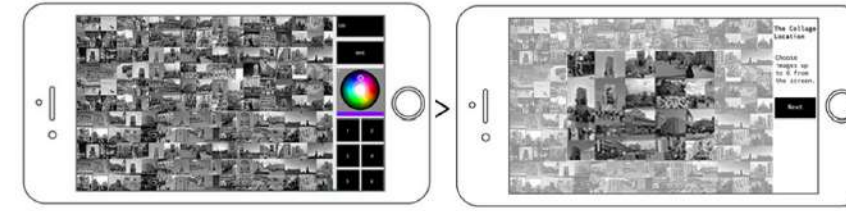
```

    graph LR
    Start[Start: Preparation] --> Concept[Concept]
    Concept --> Design[Design]
    Design --> StructuralOptimization[Structural Optimization]
    StructuralOptimization --> Panelization[Panelization]
    Panelization --> Simulation[Simulation]
    Simulation --> DigitalFabrication[Digital Fabrication: Prototyping]
    Panelization --> Shell[Shell]
    Panelization --> WaffleStructures[Waffle Structures]
    
```

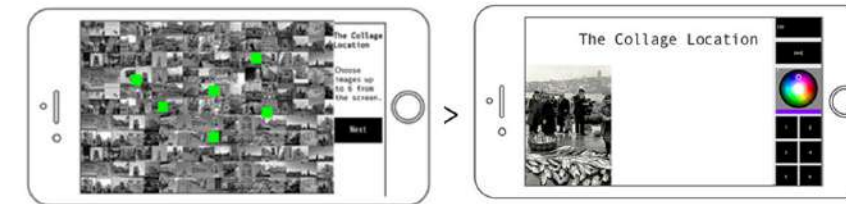
Modeling the design on Rhinoceros environment

Panelizations

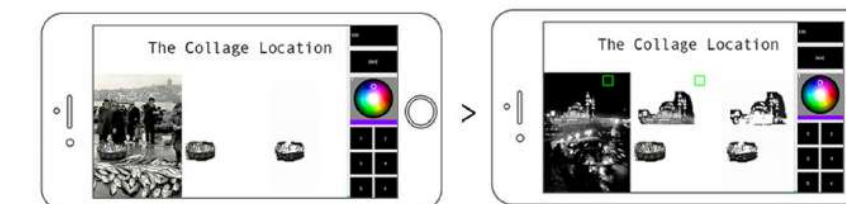
2. Collage Location



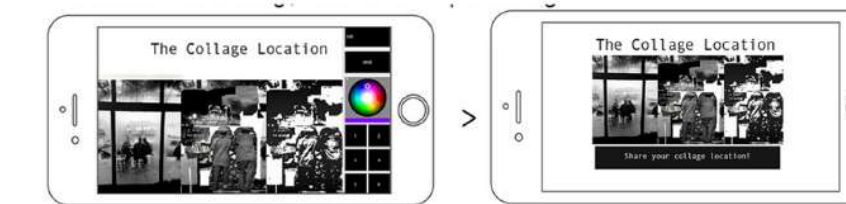
2. After the Collage Space generate the photo grid from geotag data, zoom in and out to see the images.



3. Choose your photos. Then touch on next to save your images and it will start with your first image chosen from the grid.

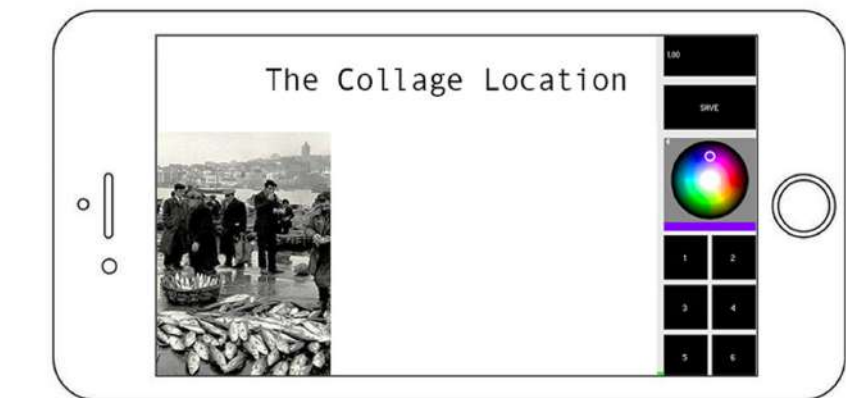


4. Choose your elements from the photos by touching the area without releasing, and start painting.



5. Go through the chosen photos by pressing 1, 2, 3, 4, 5, and 6 keys on your keyboard and continue on painting. As soon as it is completed, save and share it.

Generated Image of The Collage Location



Changing color by color wheel.

Zoom in and out slider

Save Button

Change your collage location image color

Click on the numbers or press numbers on your keyboard to go through the chosen images.

3. Pattern Generator

Pattern Generator

40 COLOUR

20 GRIDSIZE

MIRROR MIRROR CLEAN

ROTATE

SHUFFLE

RESET

SAVE

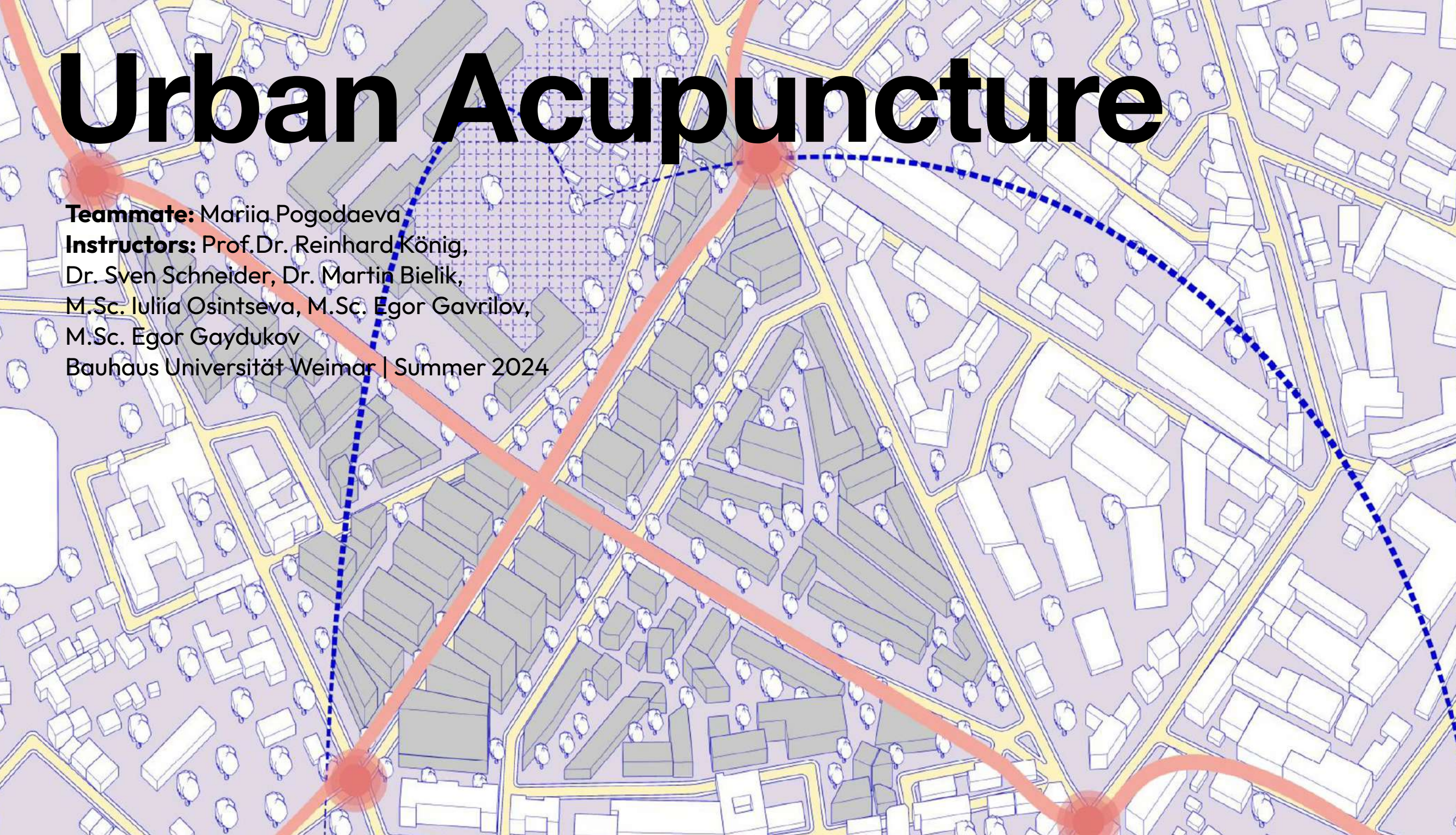
UP

LEFT DOWN RIGHT

COLOURS

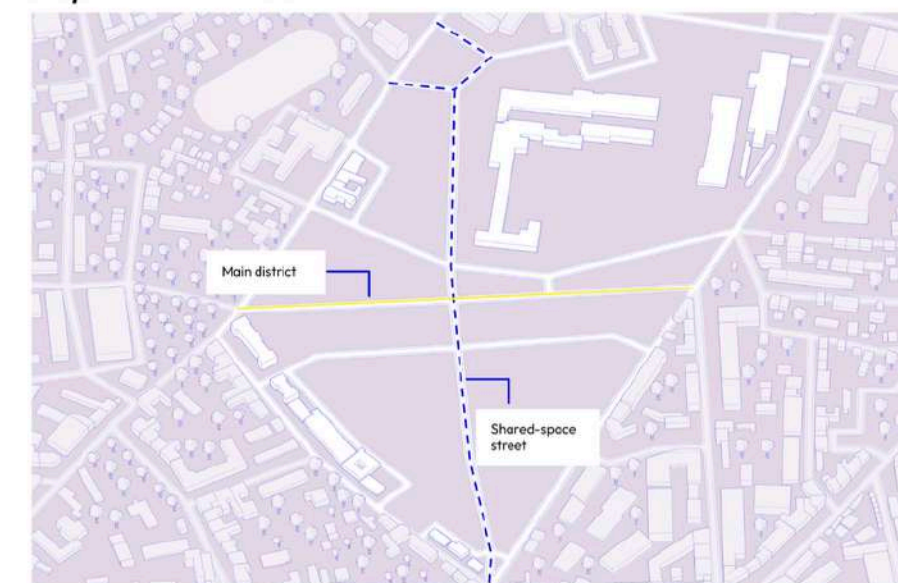
Urban Acupuncture

Teammate: Mariia Pogodaeva
Instructors: Prof. Dr. Reinhard König,
 Dr. Sven Schneider, Dr. Martin Bielik,
 M.Sc. Iuliia Osintseva, M.Sc. Egor Gavrilov,
 M.Sc. Egor Gaydukov
 Bauhaus Universität Weimar | Summer 2024

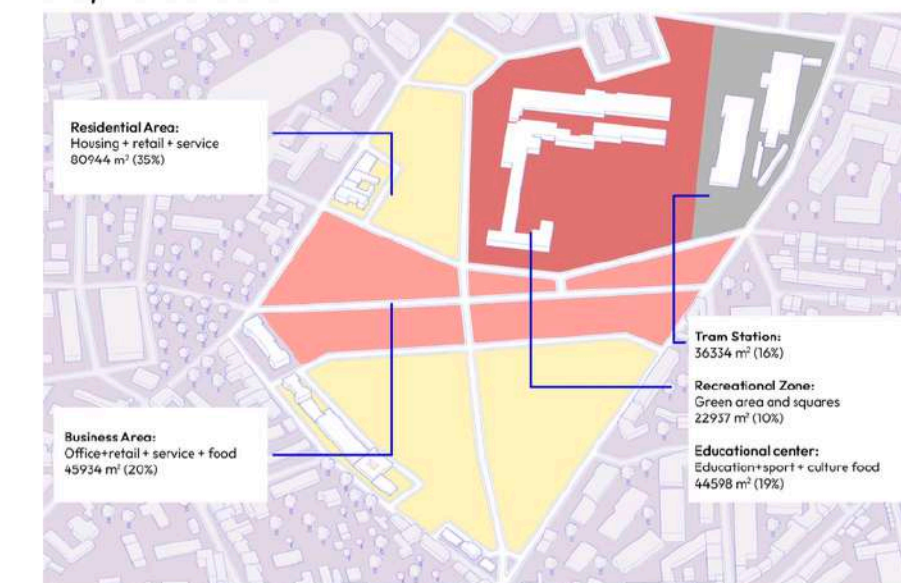


Scenario #1 - New Business Centre

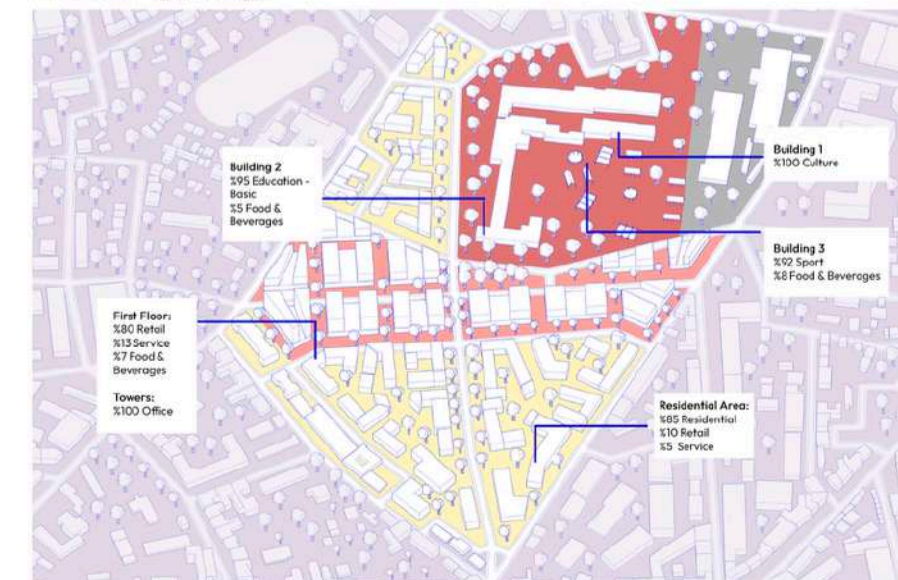
Step#1: Initial Phase



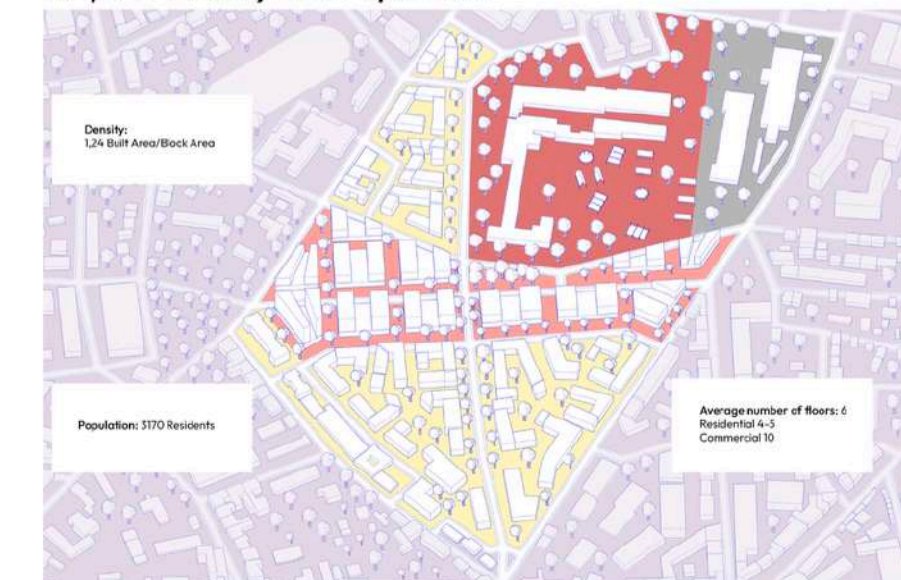
Step#2: Landuse



Step#3: Typology

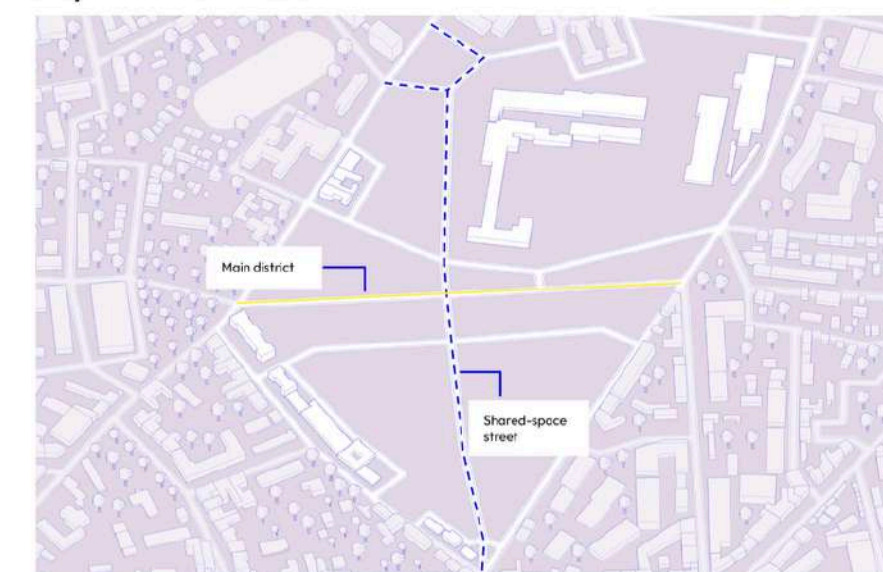


Step#4: Density and Population

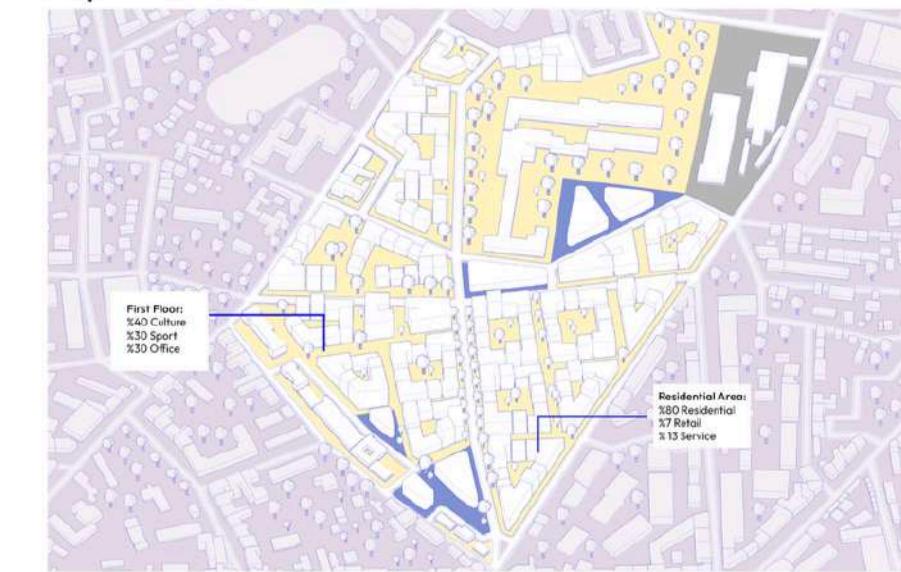


Scenario #2 - Mixed Neighbourhood

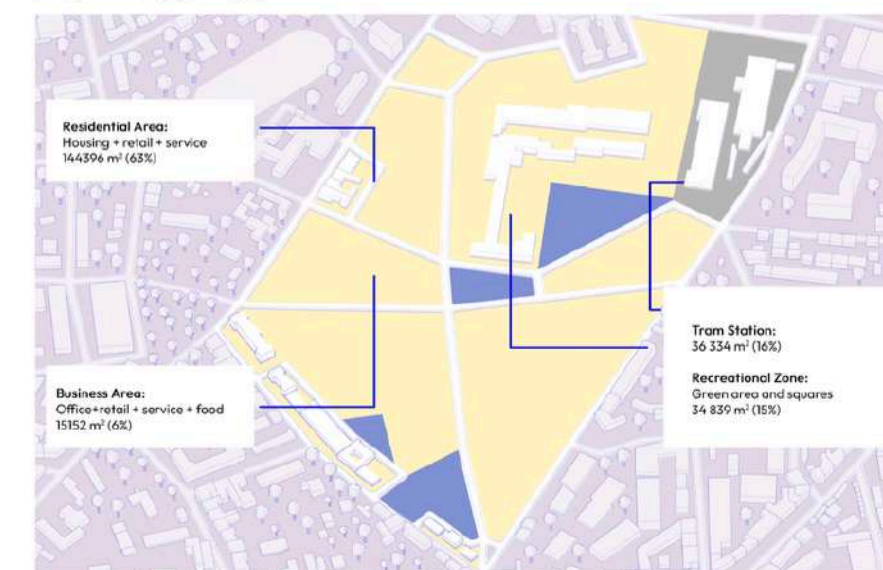
Step#1: Initial Phase



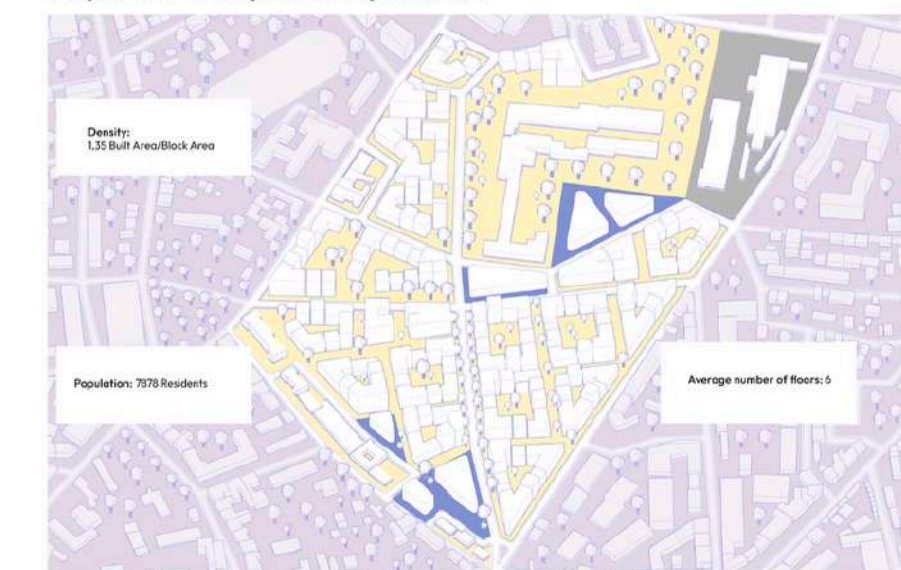
Step#2: Landuse



Step#3: Typology



Step#4: Density and Population



Urban Acupuncture

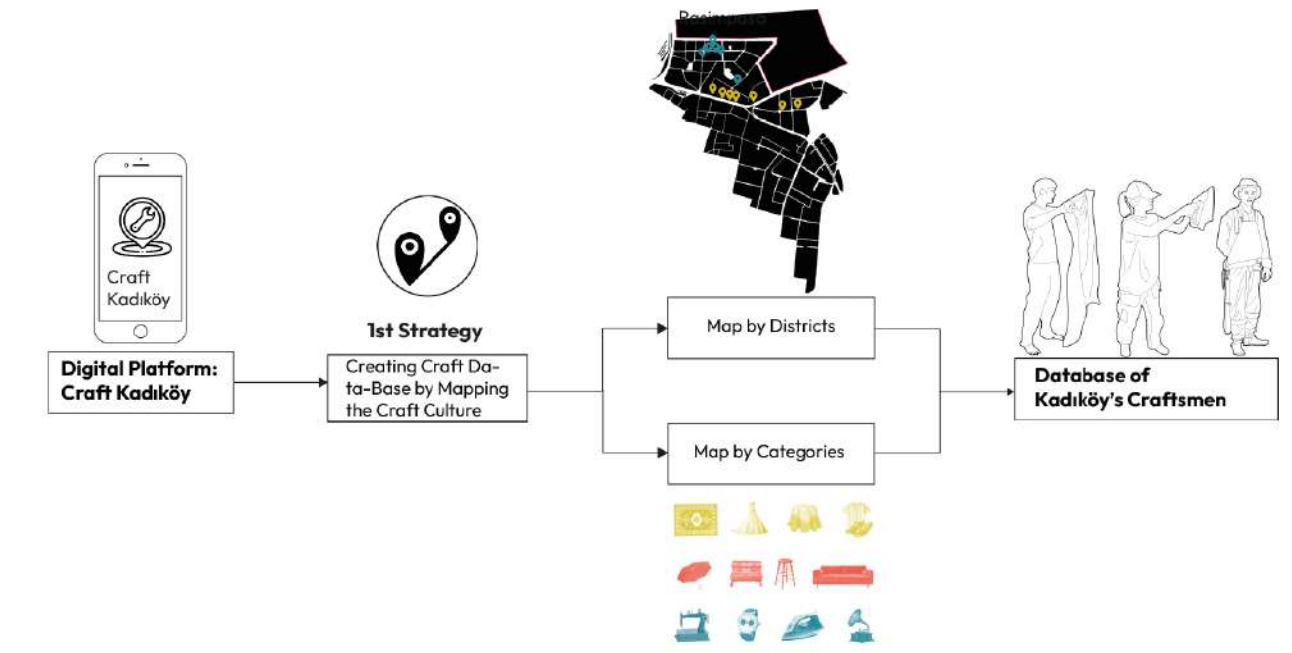
Step 1: The borders of the area



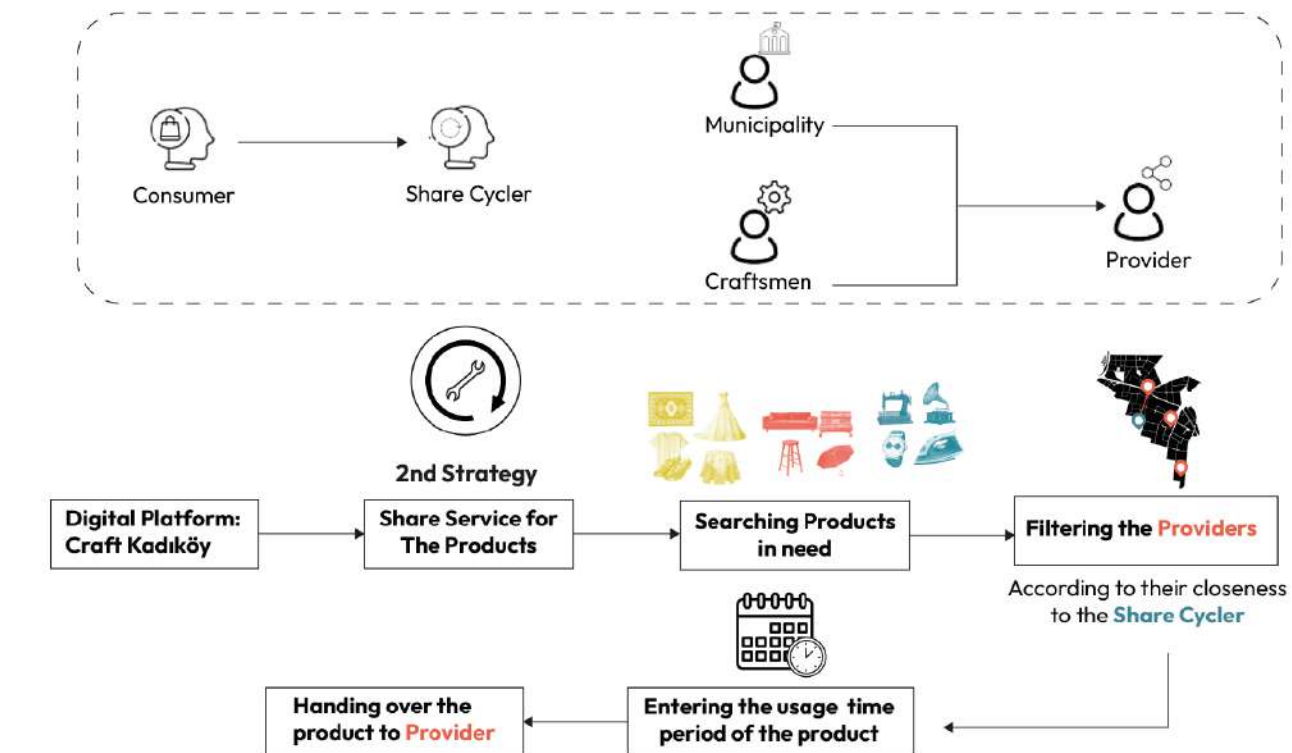
Craft Kadıköy

Teammate: Özge Börekçi
Instructors: Prof. Dr. Birgül Çolakoğlu,
Assoc. Prof. Dr. Sevil Yazıcı

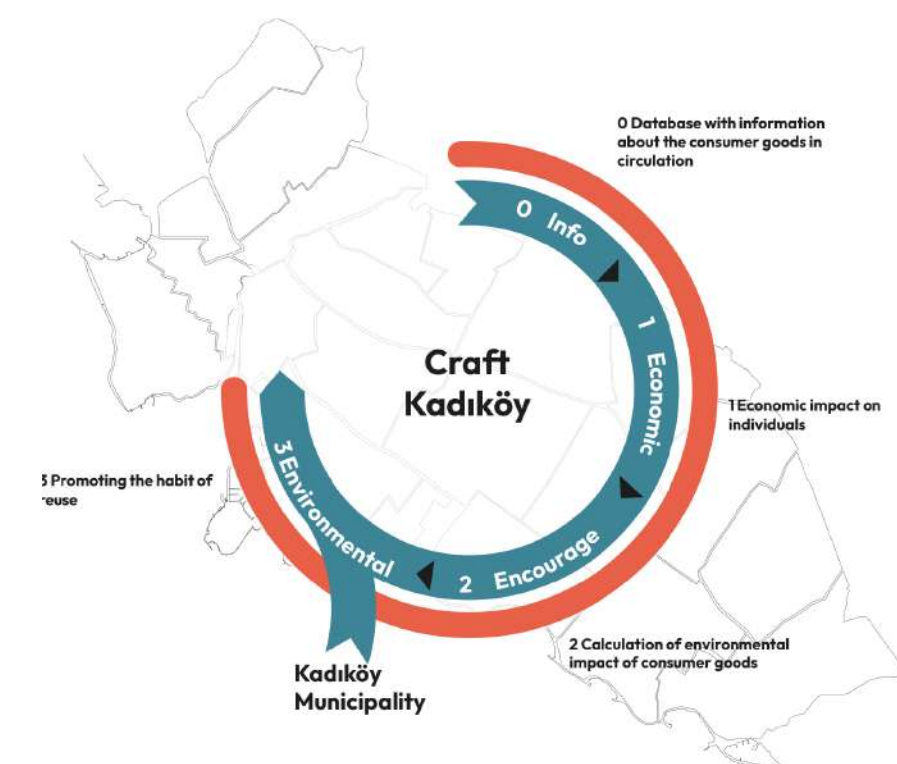
Istanbul Technical University | 2022 - 2023



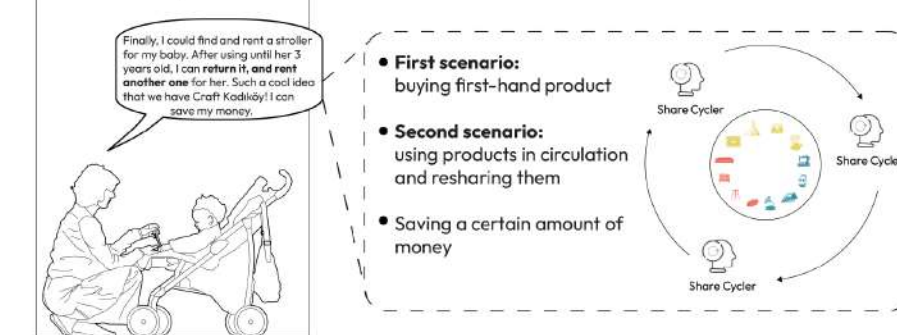
2nd Strategy / Sharing Service for The Products



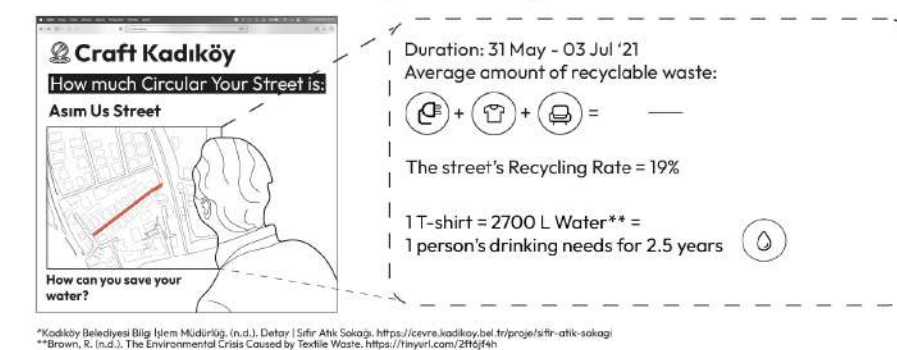
3rd Strategy / Monitoring of the Craft Kadıköy



1 Economic impact on individuals



2 Calculation of environmental impact according to two scenarios



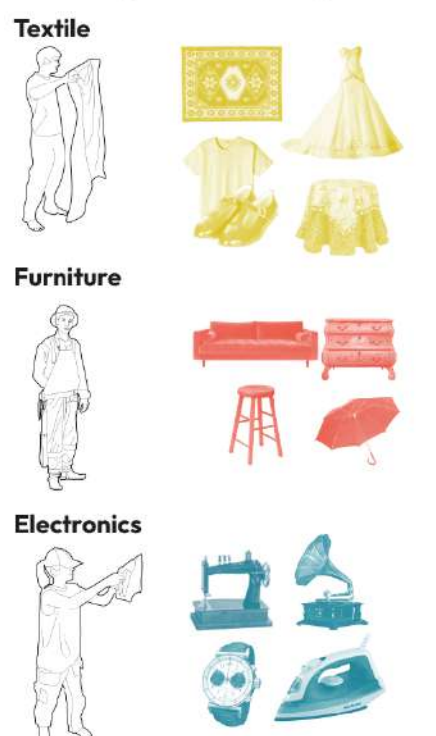
3 Promoting The Habit of Reuse



0 Information about the consumer goods and user profiles in circulation

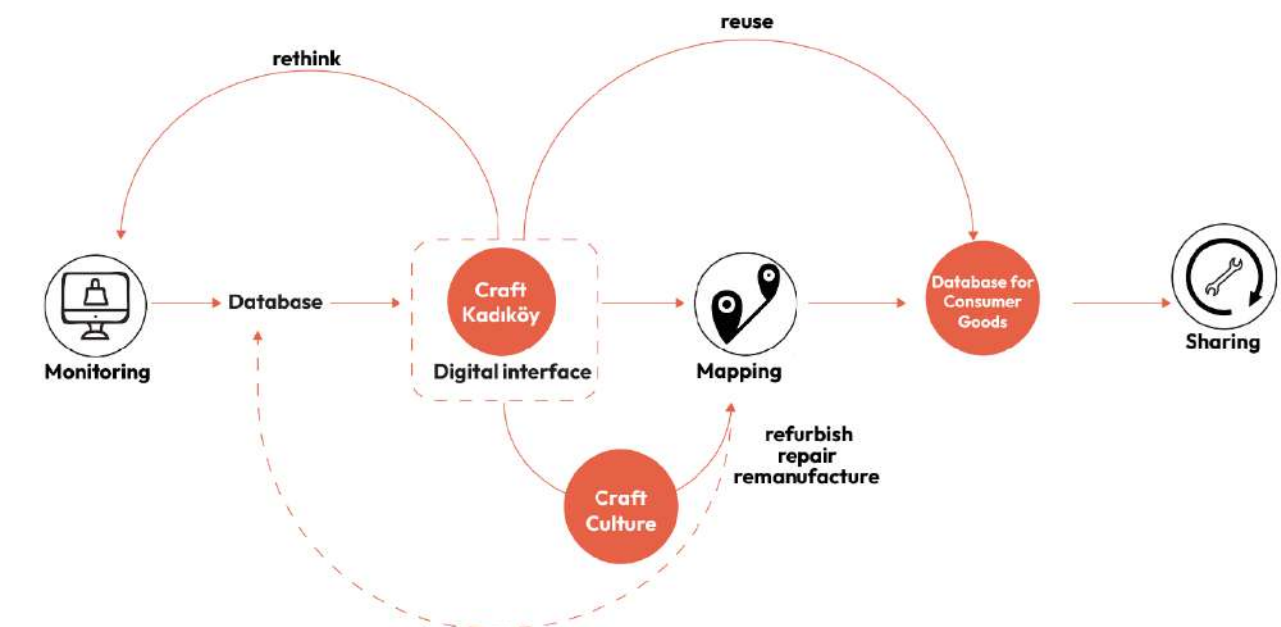
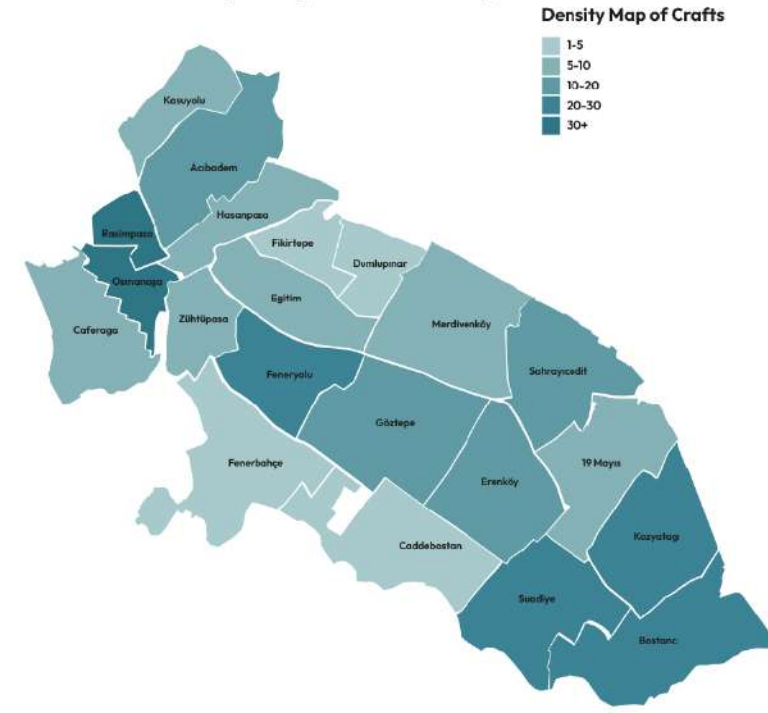


Existing Craft Categories



Developed Strategies

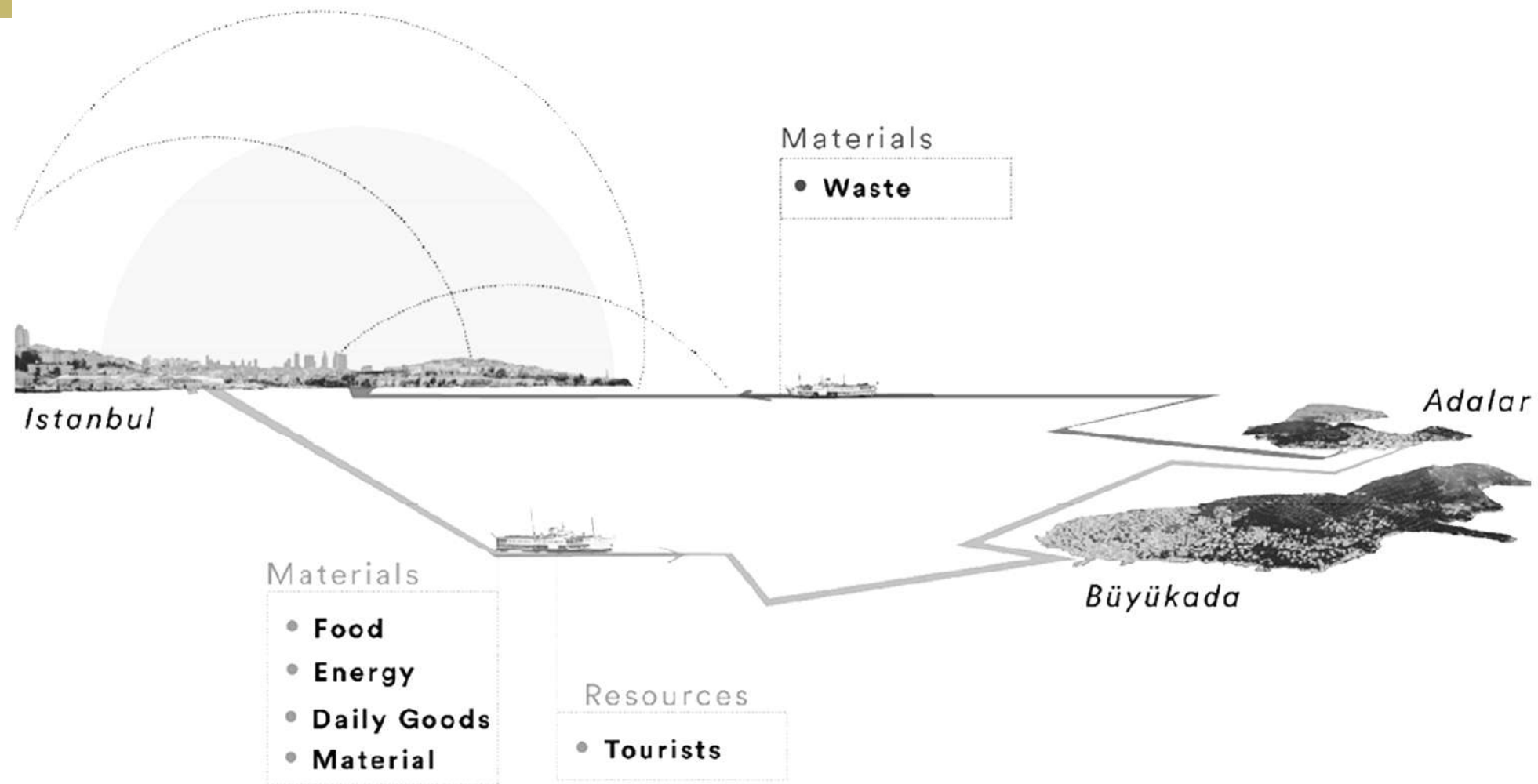
Craft Density Map of Kadıköy's Districts



Circular Büyükada



Linear Connections with İstanbul



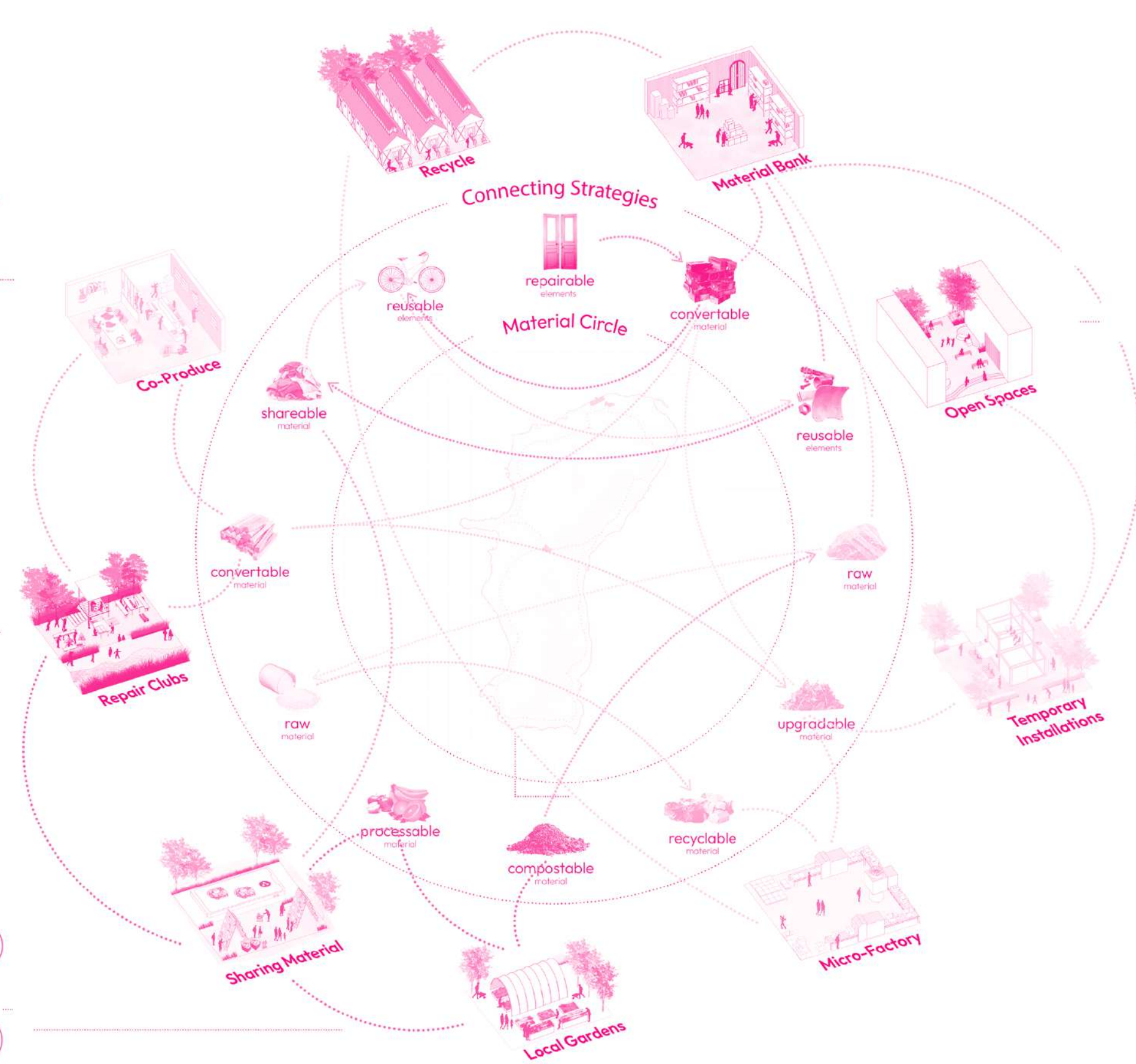
The New Material Language

Recycling
Büyükada's material platform and stock of materials used for the projects on the island and the base to find new ways of processing and upgrading not reusable materials.

Sharing Space & Knowledge
Sharing objects, tools, items, food, and other things increase the usage and value of products and help to consume less individually. To do this, physical spaces and digital platforms are needed on the island.

Repair Culture
This transformation can be done through low-threshold projects, working together on repairing and converting things and therefore creating know-how and awareness for a circular society.

Produce Locally
Islands potentials of local food production must be activated to create also a circular flow of the organic material.
Share Communally
Sharing objects, tools, items, food, and other things increase the usage and value of products and help to consume less individually. To do this, physical spaces and digital platforms are needed on the island.



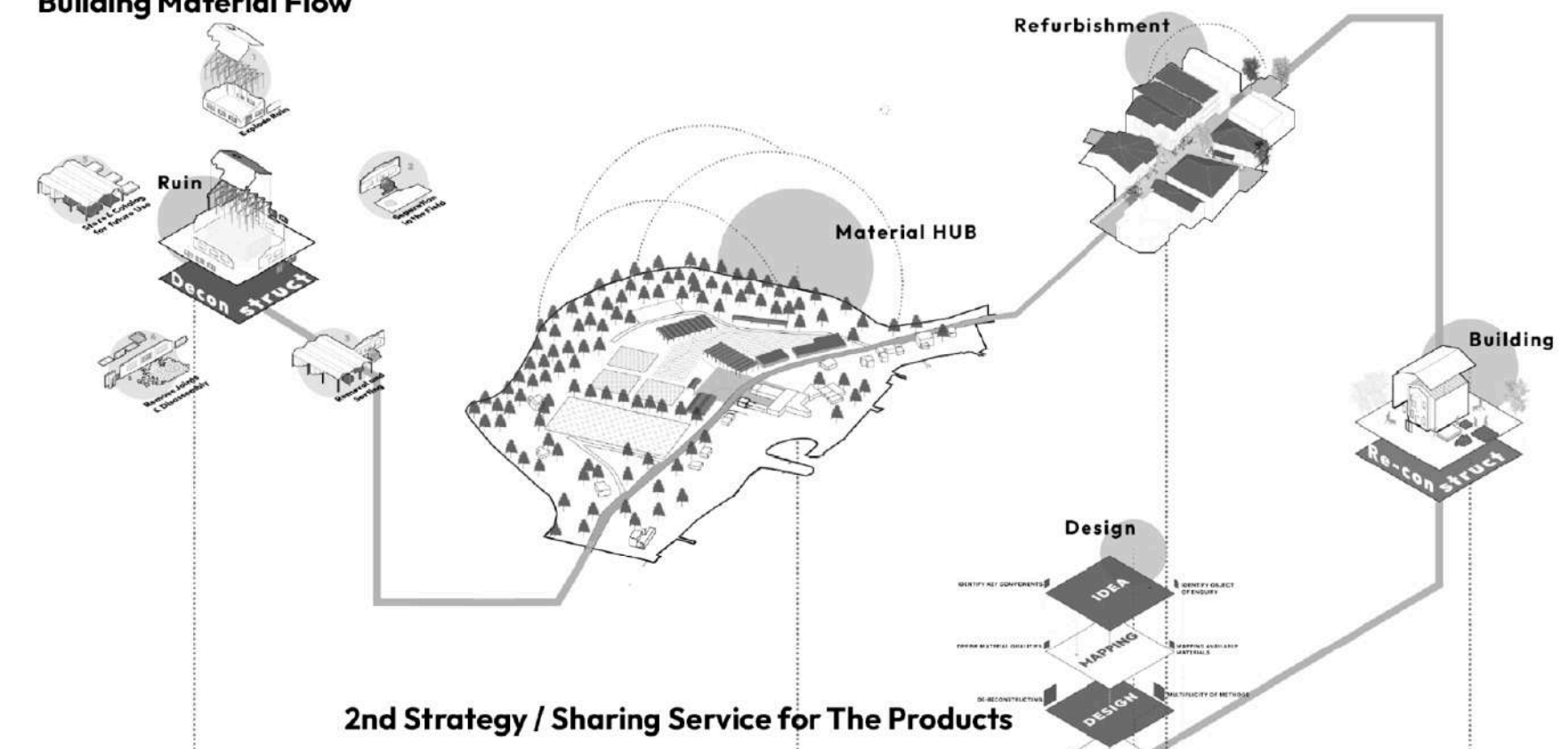
Material Bank
The Material Bank which stores and manages the distribution of reusable and repairable elements on the island. It gives the ability to make usable materials physical and digital available on the island.

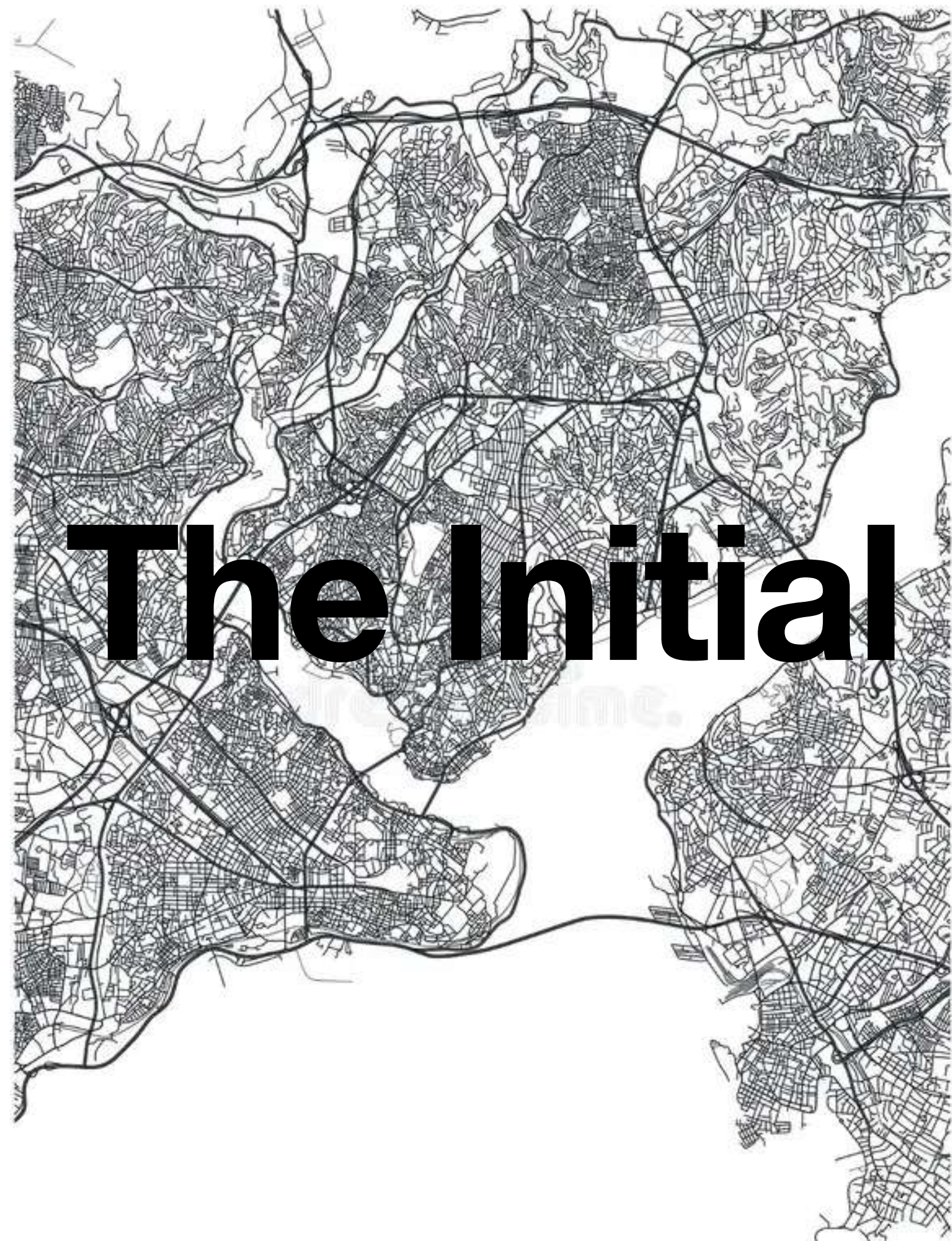
Converted Spaces
To explore the potentials of materials on the island also experimental usage of space and objects have to be experienced. Here innovation and new ideas are created, connecting them with the local culture and events.

Experiment
The experimental usage of materials to explore its real potentials is the part of the future in the circular society.

Transform Economy
Economic approaches, using the waste we produce as a resource for the new business models through the implementation of micro-factories is a chance for limited space of Büyükada.

Building Material Flow





The Initial Idea

<https://www.dreamstime.com/illustration/istanbul-street.html>



<https://www.photowall.co.uk/new-york-street-map-bw-poster>

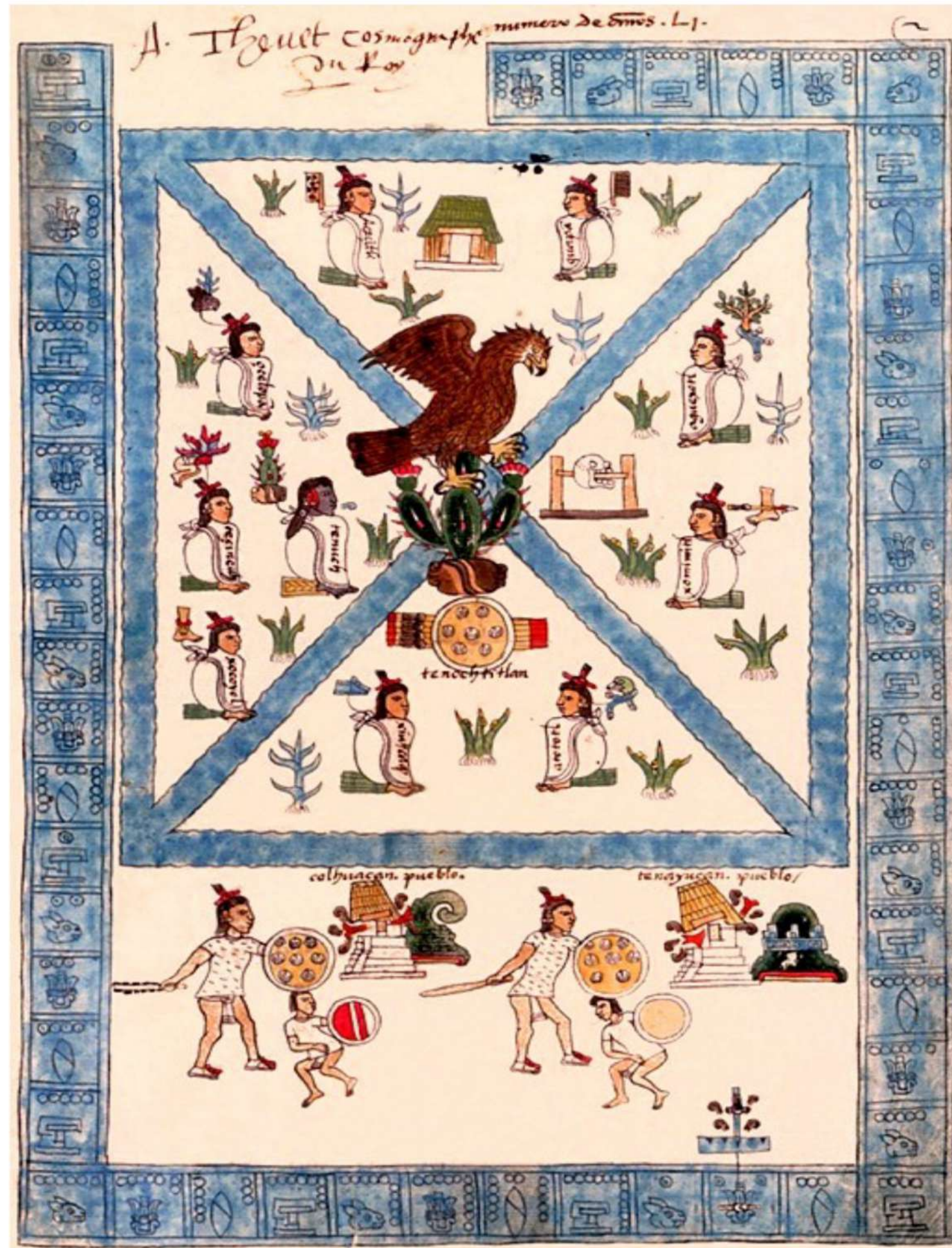


https://www.freepik.com/premium-vector/black-white-printable-street-map-art-mexico-city-mexico-travel-poster-with-coordinates-poster_384127986.htm

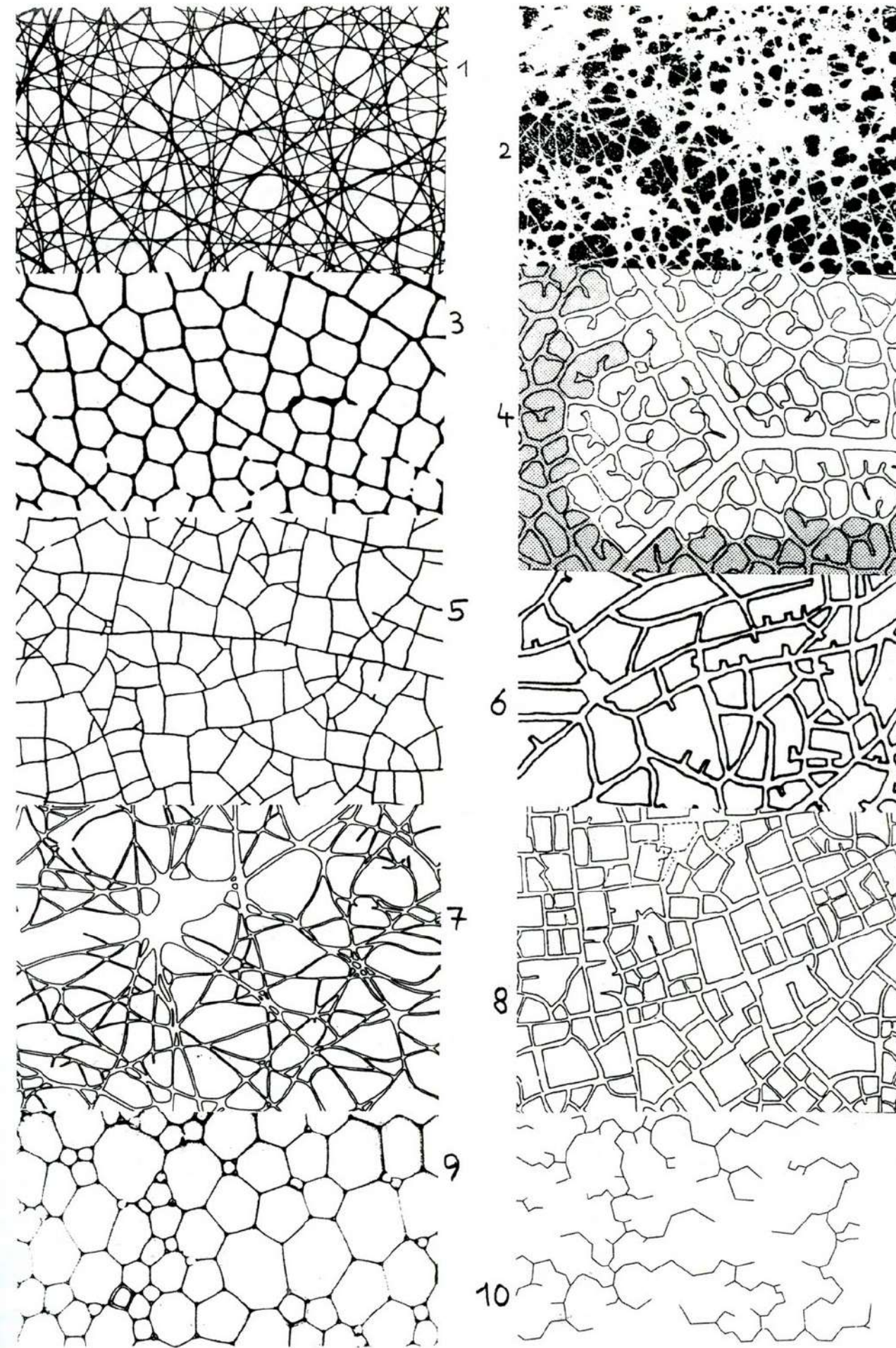
The Initial Idea

What if cities were shaped by something other than land, markets, and master plans?

The Initial Idea



2 Codex Mendoza, c. 1541, Mexico City, folio 2r. Bodleian Library, Oxford.



Occupying and connecting. Frei Otto. 2009. P.51

What does a city look like when it's generated from myth and cosmology?

What spatial grammar emerges from ecological behaviour: water, wind, animal paths or from linguistic and emotional data?