

MATERA 2019  
OPEN FUTURE

# OPEN DESIGN SCHOOL

Matera



What if, instead of renting or buying the infrastructure for all the events of 2019, we start a design school and develop it locally?

Scientific Director: Joseph Grima

Project manager: Rita Orlando



2 lab managers

1 communication officer

2 technical coordinators

15 professionals selected through international public calls

(architects, designers, artisans, engineers, carpenters, artists, performers, interaction designers, software developers, graphic designers, photographers)



- learning by doing
- interdisciplinary and multicultural approach
- sharing of knowledge as the core of the program
- horizontality: everybody teaches and everybody learns
- collaborative local and European network
- documentation and communication of processes

- Tools and infrastructure for Matera 2019.  
*Display and communication of culture with outsource as little hardware as possible.*
- Highlight the local, urban particularities as a starting point for global tools  
*Create an abacus of possible configurations informing the design of the system.*
- Define a precise educational program for both the participants of ODS and the community  
*Workshop, lectures and informal meetings*
- Develop an open design process  
*Develop the Open Structure philosophy and the scaffolding system of the United Structure*
- Mix the use of local knowledge and traditional craft with new technologies and global experiences  
*From tradition and knowledge to global experiences and new technologies*
- Design and organize public events to be used for prototyping and testing (crash test)

local schools/university

open design school

local business





- two main workshops:
  - the Venues of Matera 2019
  - Stage system for public space
- workshops' participants:
  - 1/3 from Matera
  - 1/3 from Italy
  - 1/3 from abroad
- community building:
  - open workshops
  - open talks

# **The venues of Matera 2019: toolkit**



With more than 400 venues mapped, the project provides both technical and visual information of each place and is focused not only on the historical center of Matera but also on its peripheral areas and the region, underlining the capacity of the city and region as a whole.

The goal is also to prepare the city for its further development by transforming public spaces, pathways, fields, and architectural complexes into dynamic points to be discovered in the space, and eventually into venues able to host a variety of events from 2019 onwards.

Identify and explore places with potential to host events in the next European Capital of Culture



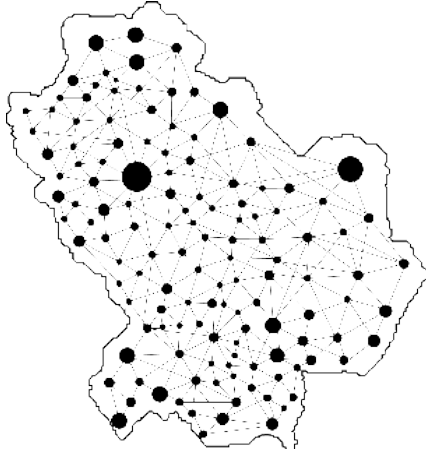
Underline the capacity of the city and region beyond the well known historical center

Show the potential of (underused) spaces that can host events beyond 2019

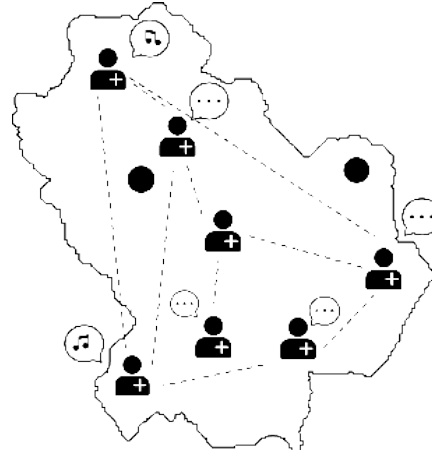


Put the spotlight on the unknown or forgotten venues in the city, helping to open a debate.

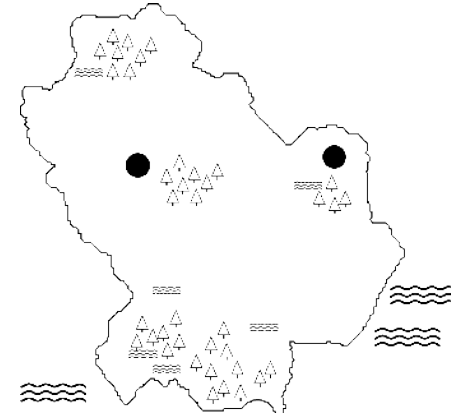
CONNECT VENUES



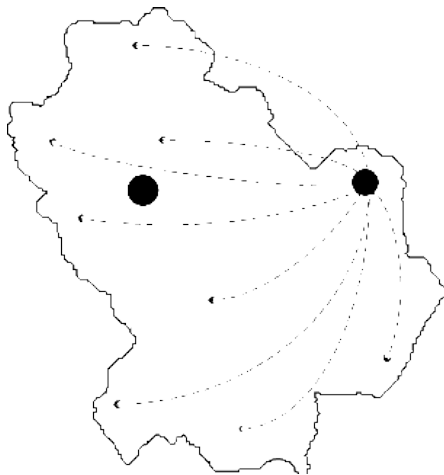
CONNECT PEOPLE



UNDERLINE THE MAIN NATURAL ATTRACTIONS



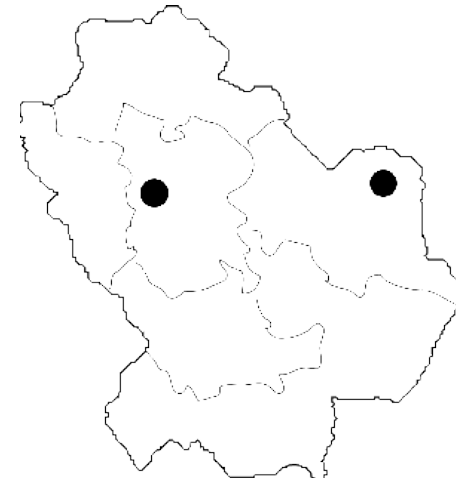
REACH REMOTE PLACES



UNDERLINE THE MAIN CULTURAL ATTRACTIONS



CONSIDER THE GEOGRAPHICAL DIVISION



## Surveys

Type of Place  
Property  
Current Usage  
State of Conservation  
Coverage  
Size & Capacity  
Parking  $\leq 100m$   
Motorised Accessibility  
Wheelchair Accessibility  
Transport  $\leq 400$

## Analysis

The next phase, the digitalization of the sheets, was also a work of correcting errors and organizing informations.

The collected data have been inserted into a database connected to Openstreer Map



# OPEN DESIGN SCHOOL

Matera



**432**  
venues mapped



**41**  
cities visited



**60.000m<sup>2</sup>**  
is the size of the biggest venue



**30m<sup>2</sup>**  
is the size of the smallest venue



**160 football fields**  
are equivalent to the size of all venues together



**129**  
venues have a vista point



**58%**  
of the venues in Matera are located outside the Historical Center and Sassi



**7%**  
of the outdoor venues can host more than 1000 people



**73**  
venues are piazzas



**68**  
venues are at least partially excavated



**203km**  
separates the farthest venue from Matera



**2.677km**  
driven in field trips



**270**  
is the number of inhabitants of the smallest village visited



**1.537m**  
is the highest peak



**17%**  
of the venues are indoor spaces



**62%**  
of the venues are public property



**82%**  
of all venues are in a good state of conservation or need only minor repairs



**86%**  
of the underused venues are in a good state of conservation or need only minor repairs



**12%**  
of the venues are abandoned or not being used



**33%**  
of all venues need some kind of repair to host an event

The data were collected within an online platform that allows 3 ways of viewing / browsing the data:

- MAP
- FILTER
- NETWORK
- ROUTES
- GALLERY
- INFOGRAPHICS
- FORMAT for entering data

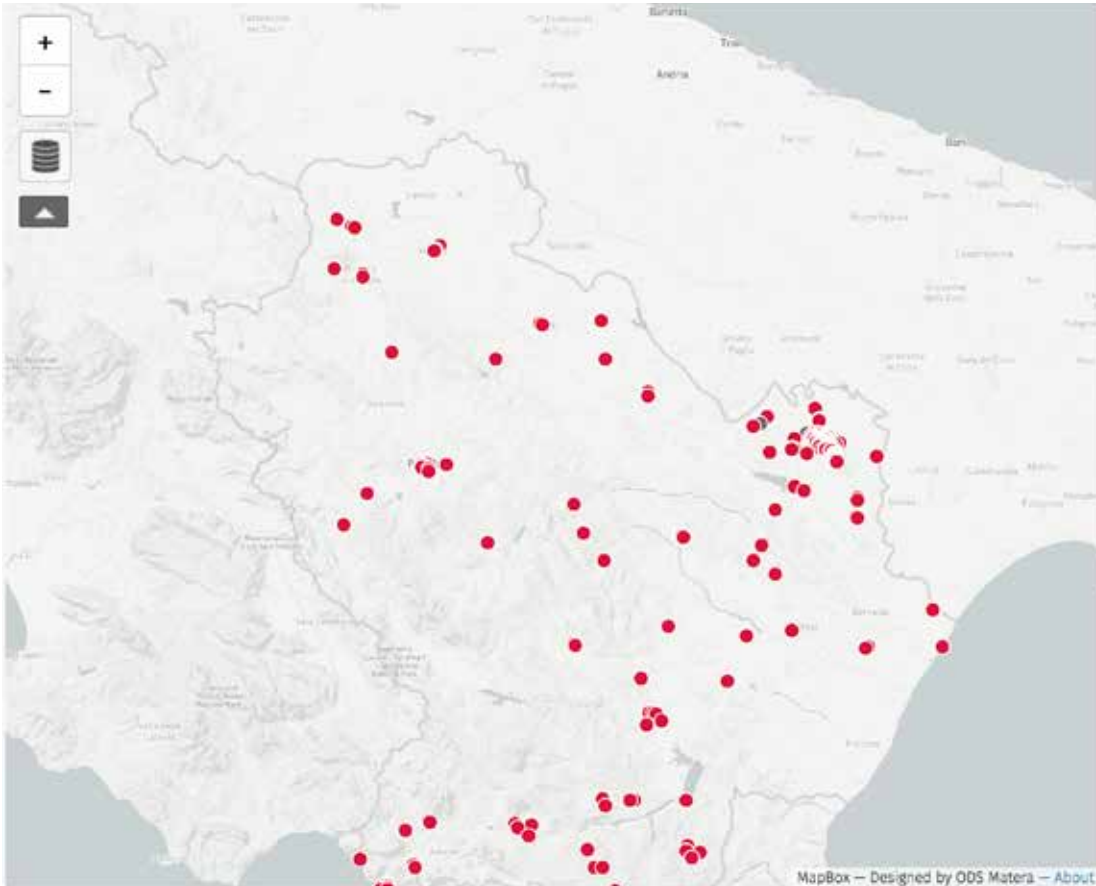
The digital cartography compared to the traditional one, with different viewing modes, facilitates navigation and consultation, is interactive and dynamic with the possibility of implementation.



# OPEN DESIGN SCHOOL

Matera

Platform



**Matera, Piazza Vittorio Veneto**  
*Piazza Vittorio Veneto, 75100 Matera MT (Historical Centre, Piano)*  
→ [More photos from this Location](#)

**Distance to Matera:** N/A km  
**Inhabitants:** >10000 people

**Planning Period:** Until 1935, **Year of Construction:** N/A  
**Type of Place:** Infrastructural, **Specification:** Piazza  
**Property Status:** Public  
**Current Usage:** Being Used  
**Size:** 1,001 – 5,000 m<sup>2</sup>, **Measured Size:** 2430 m<sup>2</sup>  
**Capacity:** 1,000+ people  
**State of Conservation:** Good  
**Coverage:** Open Outdoor Space  
**Vistapoint:** Yes  
**Excavated Architecture:** Partially  
**Parking within 100m:** ≤ 50 cars  
**Motorised Access:** Full (up to Big Truck > 75t)  
**Wheelchair Accessibility:** Yes  
**Public Transport within 400m:** Yes  
**Existing Infrastructure:** Electricity, Urban Lighting, Service Water, Drinking Water, Public Internet

**Suitable for:** Installation, Concert, Theater, Visual Arts, Dance, Performance (Notes: The space can host both temporary and permanent events.)  
**Architectural & Landscape Elements:** The main characteristic of the square is its layout developed in the early 80s after a

MapBox — Designed by ODS Matera — About

The map Open Street Map based

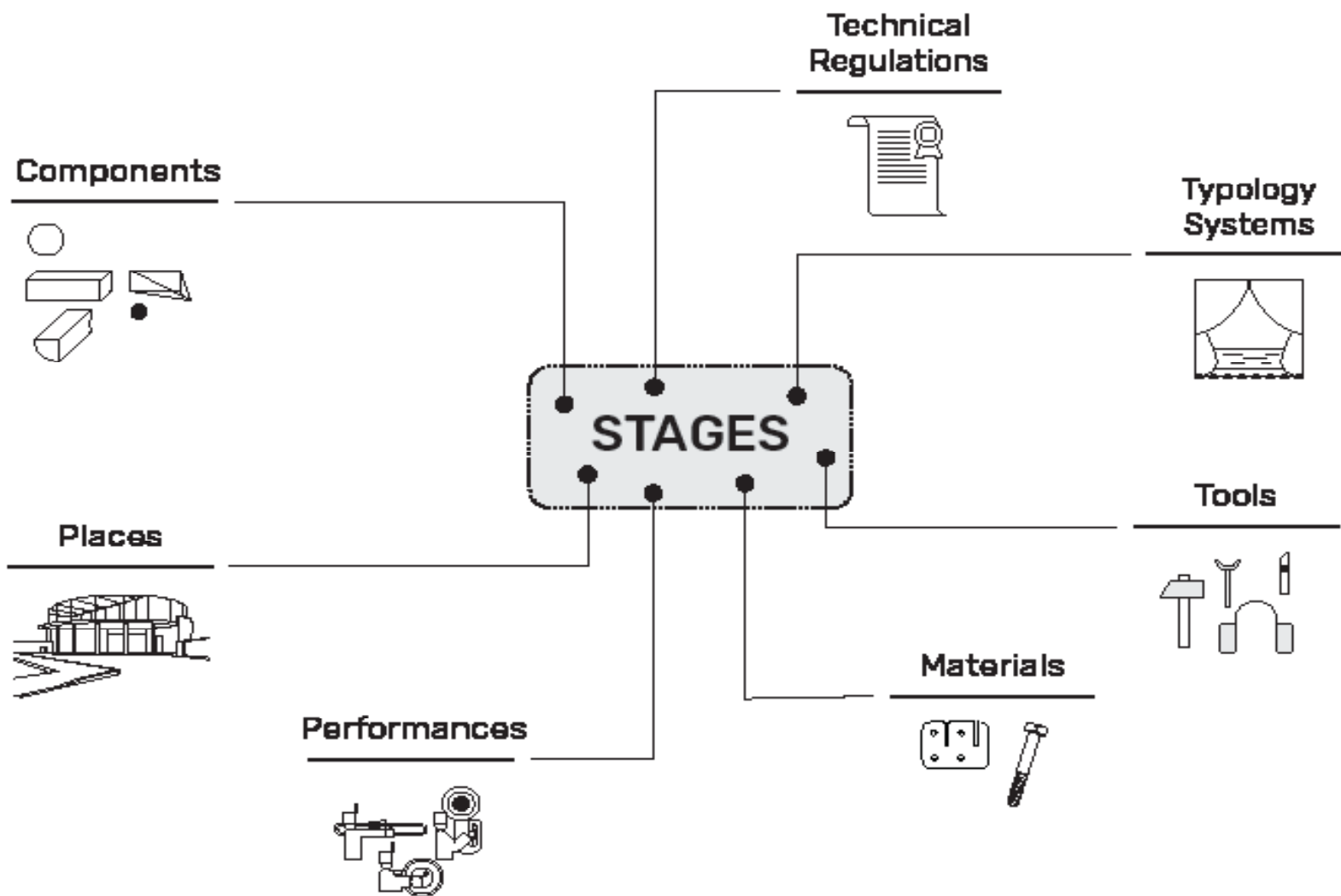
You can choose which information to show or hide or search for a specific place using the BROWSE DATA bar

At each point on the map correspond a series of information.

By clicking on each one a POP-UP CARD appears with a cover image, a link, which refers to the gallery

# The stage system design: abacus





**Stages studies**

## Type of Performing Arts: Music Concert

Music Concert - Opera - Ballet - Theater - Performance Art - Poetry and Talk - Fashion Show - Exhibition - Sport - Dance - Cinema - Circus



The Abacus of elements collects all the researches and the visions of the Stages Workshop, presenting the evolution of our design process. The Abacus it is a tool that allows infinite combinations of single architectural elements that dialogue between each others and with the surrounding environments.

# Abacus of elements: layout

**01 - WHAT IS A STAGE?**

A stage is composed of

- Platform
- Vertical Structures
- Covering Structures
- Auxiliary and Supporting Structure

<b>Main Components</b>	<b>Materials</b>
Platform	Steel
Tower	Aluminum
Wall	Wood
Seats	Textile
	PVC
	Carpet
	Ropes
	Cables
	Foam
	Rubber Antislippery

<b>Secondary Components</b>	<b>Objects to Hold</b>
Panels (net, sheet, corrugated)	Light
Ladder	Speaker
Stair	Projector
Slope	Board
Handrail	Screen
Curve Parts	Scenary

Introduction

**02 - STAGE AND SPECTATOR DIMENSIONS**  
(Ref. Kojima Gakutoshi)

**Stage Space Size**

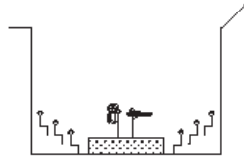
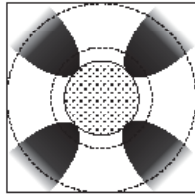
**Human Space Dimension**

Introduction

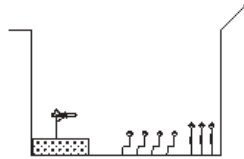
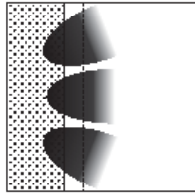
# Abacus of elements: layout

## 02 - STAGE AND SPECTATOR DIMENSIONS

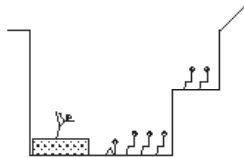
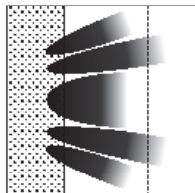
(Ref. Kojima Gakutoshi)



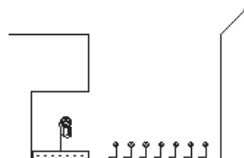
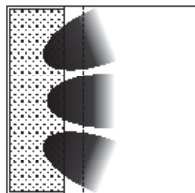
Stage centre, outdoor | Seating: seats, 360° encirclement



Stage at end, outdoor | Seating: seats, no encirclement



Stage at end, outdoor | Seating: seats on different levels

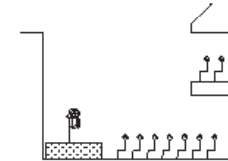
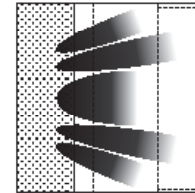


Stage indoor with proscenium | Seating: outdoor seats, no encirclement

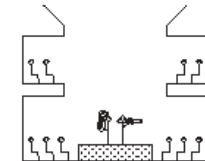
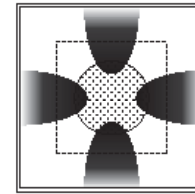
Introduction

## 02 - STAGE AND SPECTATOR DIMENSIONS

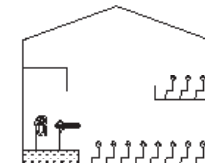
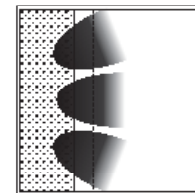
(Ref. Kojima Gakutoshi)



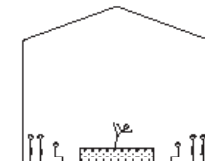
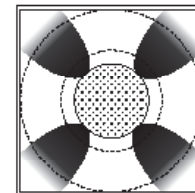
Stage at end, outdoor | Seating: seats on dress and upper circle, outdoor and indoor



Stage centre, indoor | Seating: 360° encirclement, seats on dress and upper circle



Stage at end with proscenium, indoor | Seating: seats on dress and upper circle, indoor



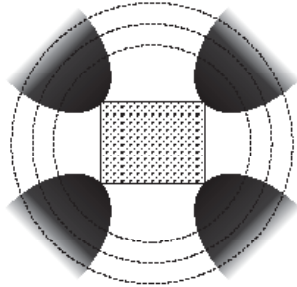
Stage centre, indoor | Seating: 360° encirclement

Introduction

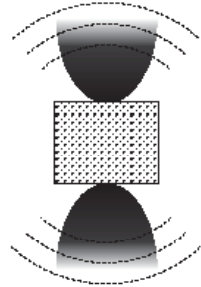
# Abacus of elements: layout

## 03 - RELATION BETWEEN STAGE AND SPECTATOR

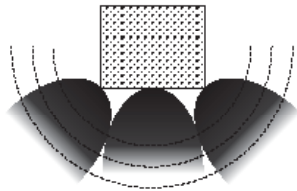
360 Encirclement



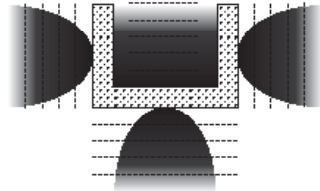
Two side encirclement



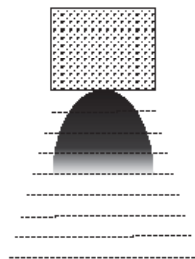
180 Encirclement



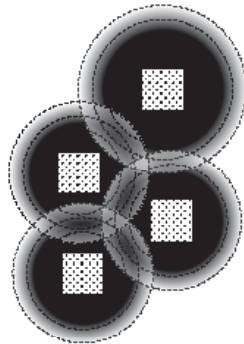
Three side encirclement



One Side encirclement



360 encirclement multiple stages

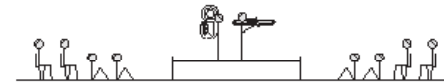


Introduction

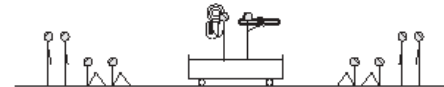
## 03 - RELATIONSHIP BETWEEN STAGE AND SPECTATOR



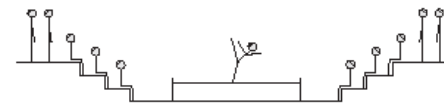
Stage on ground | Seating: standing, ground



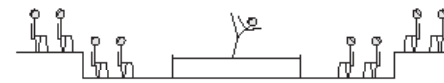
Stage: raised platform | Seating: chairs, ground



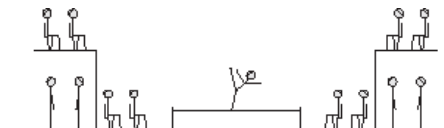
Stage: movable raised platform | Seating: ground, standing



Stage: raised platform | Seating: area, standing



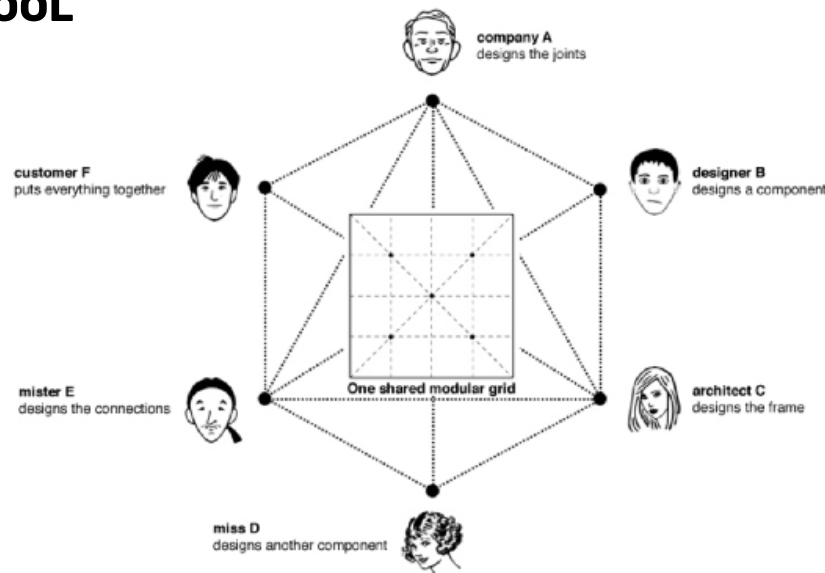
Stage: raised platform | Seating: chairs, plaza



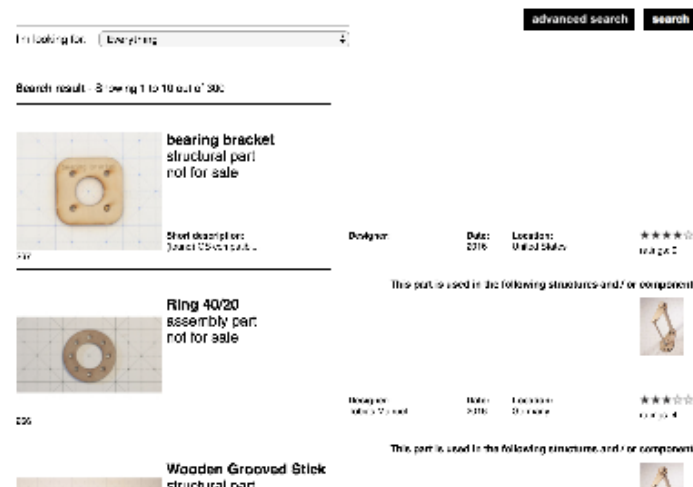
Stage: raised platform | Seating: chairs, accessible terrace

Introduction

# **Open Structure System: developing design processes**

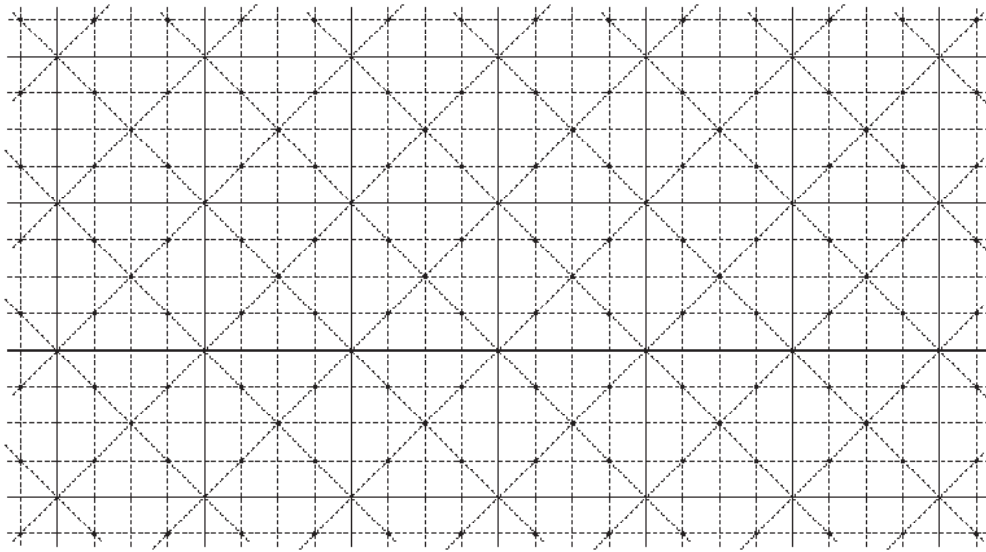


The OS (OpenStructures) project explores the possibility of a modular construction model where everyone designs for everyone on the basis of one shared geometrical grid. It initiates a kind of collaborative Meccano to which everybody can contribute parts, components and structures.



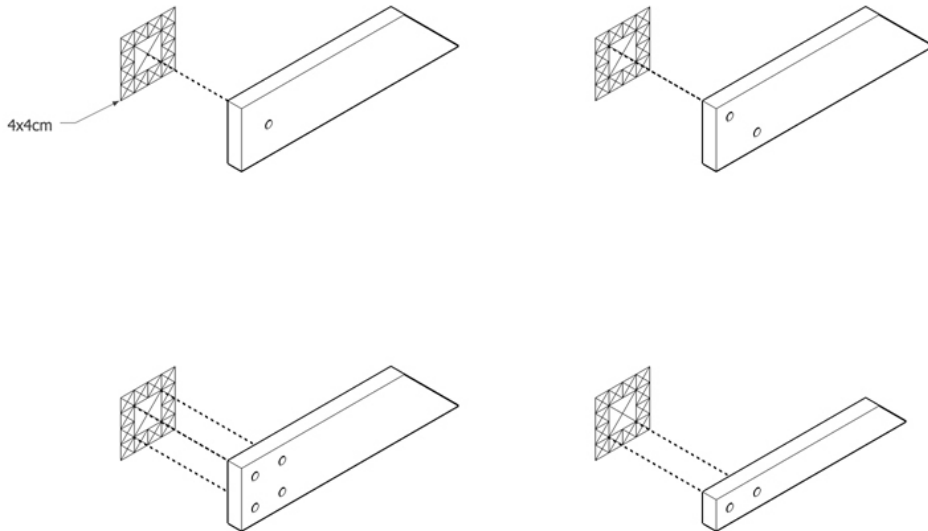
Open Structures is an open source modular construction model project created by Thommas Lommée and Christiane Hoegner. It is based on a shared geometrical grid and explores the possibility of having a common language among parts, objects, and structures, where “everyone designs for everyone.”





The OS grid is the centerpiece of the whole OS system. It's the common metrical tool that is shared among all participants, which allows them to design interchangeable parts, components and structures independently from each other.

The grid is built up out of 4x4cm squares. The borders of these squares mark the cutting lines, its diagonals mark the assembly points and its enclosed inner circles define interconnecting diameters.

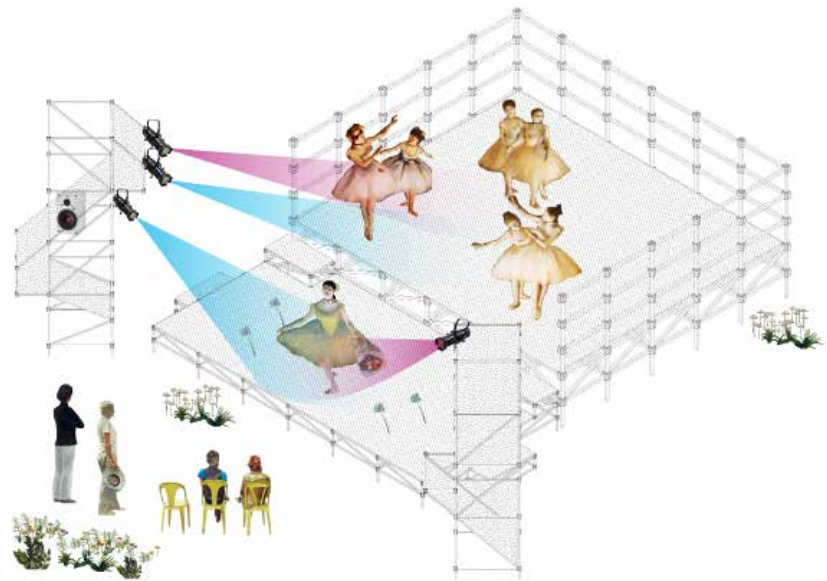
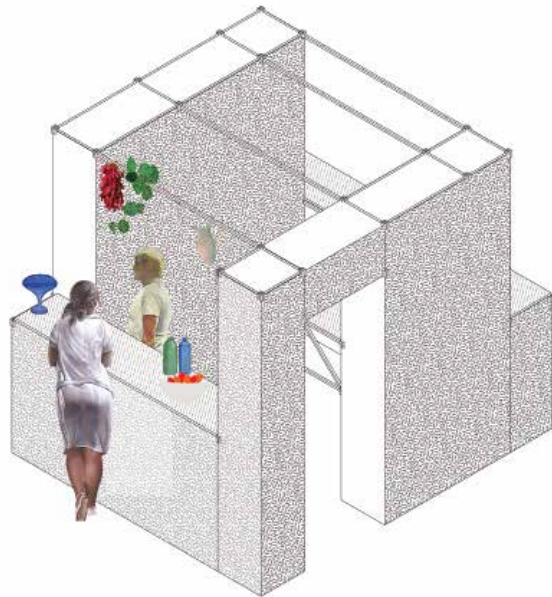
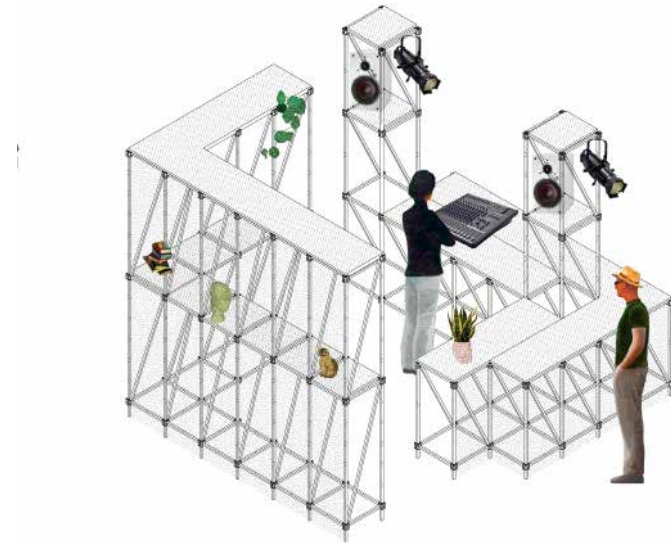


**Installations in public spaces:  
first design experiments**

# OPEN DESIGN SCHOOL

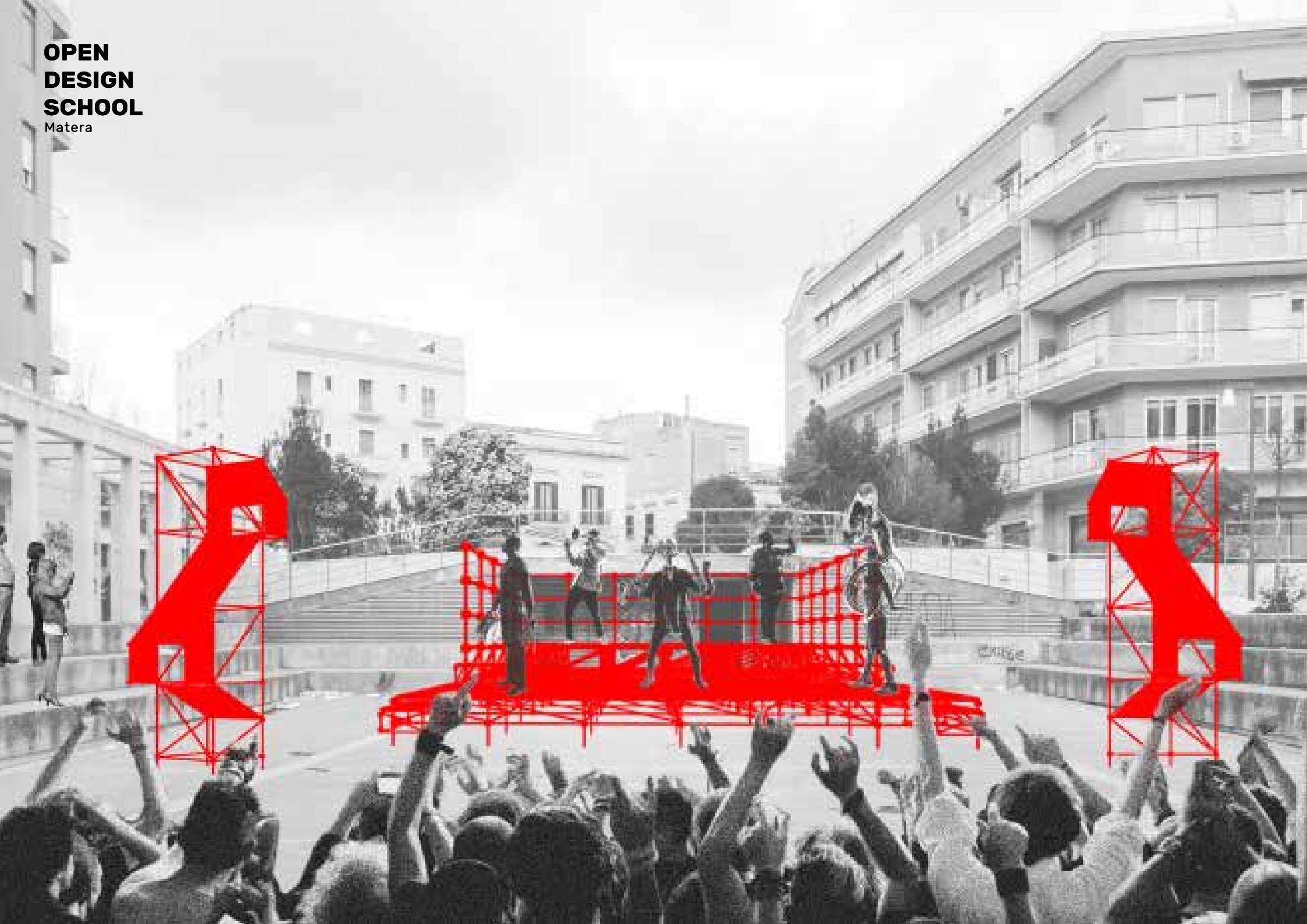
Matera

## Configurations



**Visions:  
experimentations in Matera landscape**

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SCHOOL**  
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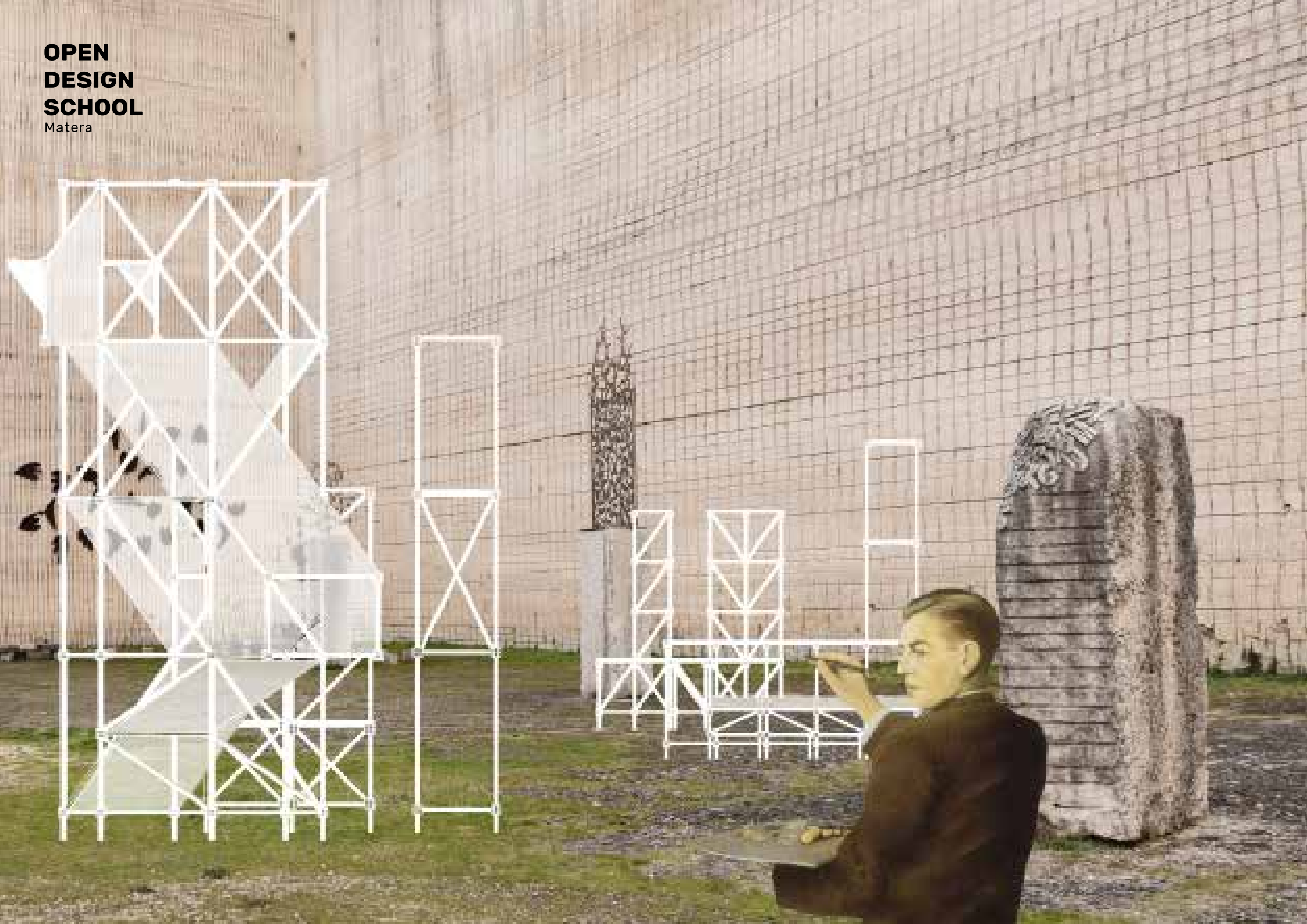
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SCHOOL**

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Share knowledge

Provide a capacity building tool for the local community

Set-up an experimental school at the edge of Europe, putting Matera at the center of a global network

Set-up a school open to the public, where everyone can experiment the “learning by doing” methodology

Contribute to the open design movement

Provide open source toolkit (through documentation and communication of processes)

Mix the local knowledge and traditional craft with new technologies and global experiences

Transform the city into a living lab for experimentation

**OPEN  
DESIGN  
SCHOOL**  
Matera

**See you in Matera!**

**Rita Orlando - Project Manager**  
[www.odsmatera.it](http://www.odsmatera.it)

