

Volta - Cultural center

A.R.S. Lachman - 4672259
A.R.S.Lachman@student.tudelft.nl
Delft University of Technology
AR3MET105 A Matter of Scale (2023/24)

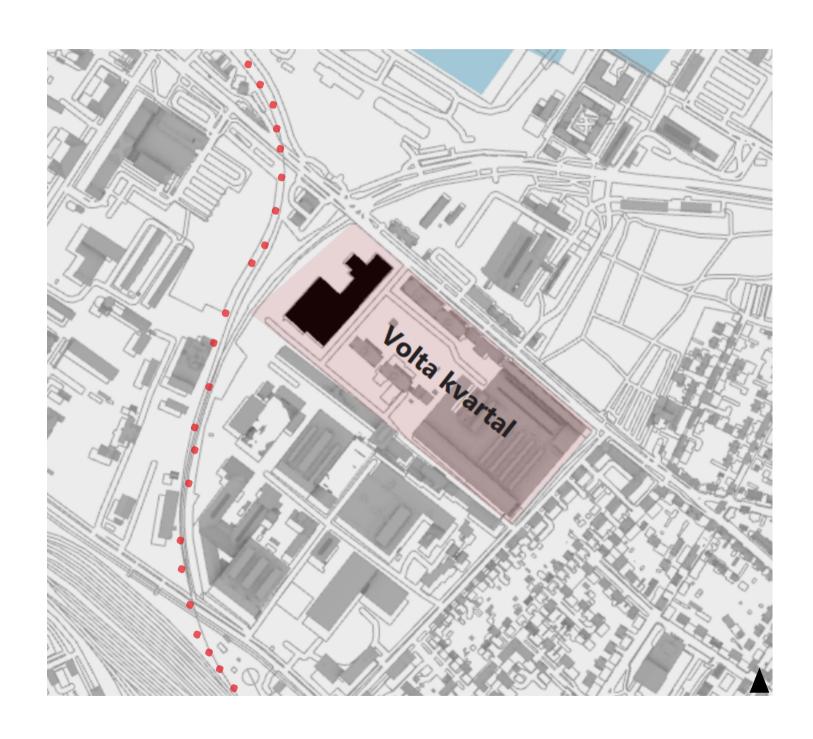
Kalamaja

Means 'Fish House'

The Bay of Tallinn

Cultural importance

Volta & Krulli Factory Quarters



History Volta Factory

Manifacturer of generators and engines

Pride of Kalamaja







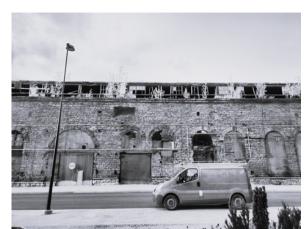
Mix between new and old

Ruins & concrete rot and hazardous conditions

Social & technical safety concerns + underutilization

"Kalamaja Days" social concept



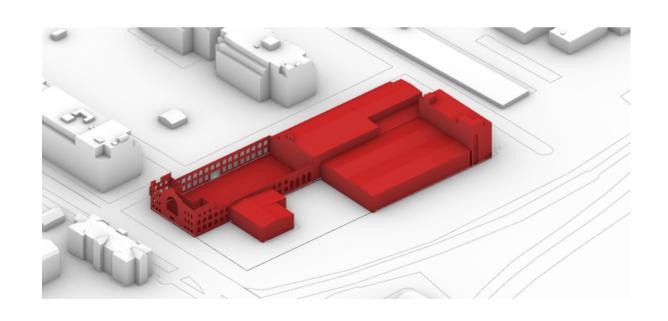






Heritage

Limestone walls
Basilica-type arches



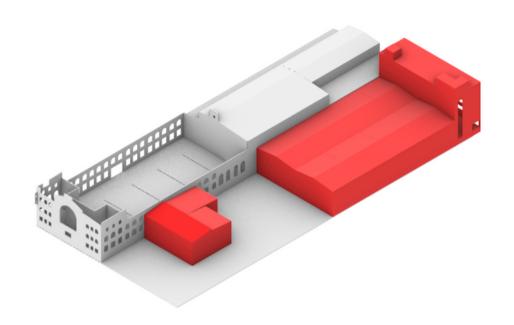








Compromised structures



Concrete rot

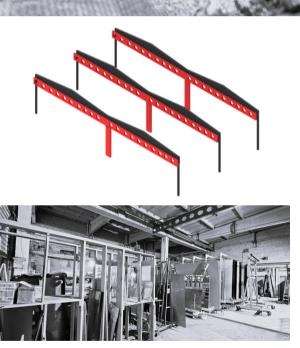
Danger of colapse
Incongruity

Hiding Heritage













Volta neighbourhood

Current state & vision

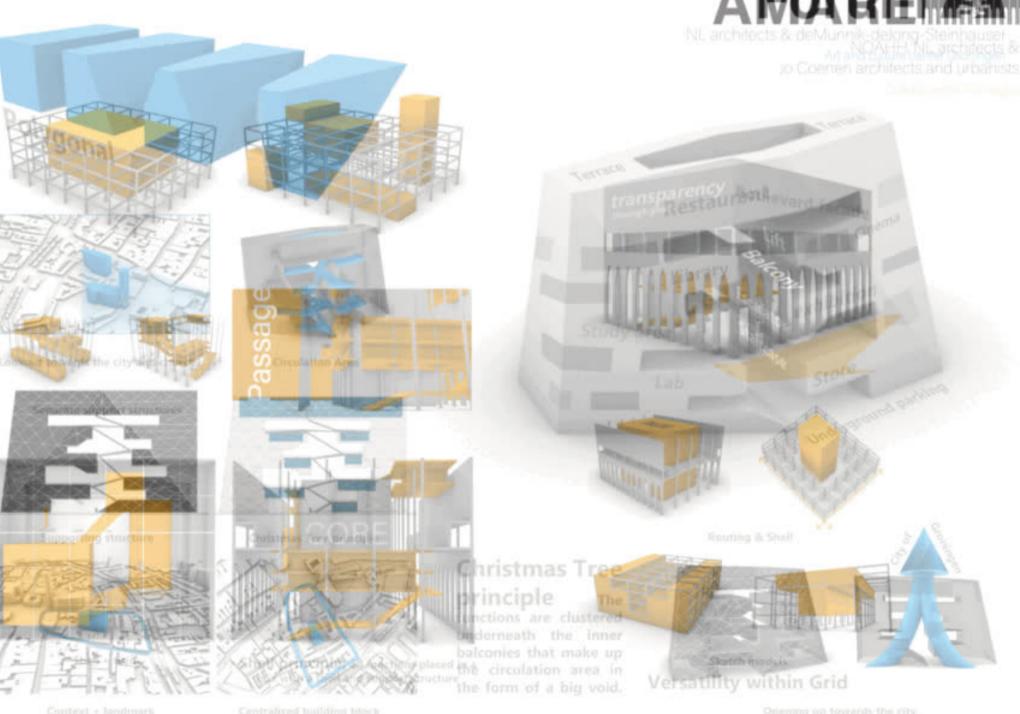
Preserving heritage in a modern way.

Seaside residential area





Casestudies



Centralized

Revitalizing vacant post industrial heritage and urban development through restoration and renovation.

Transformation of the Volta Factory into a cultural center

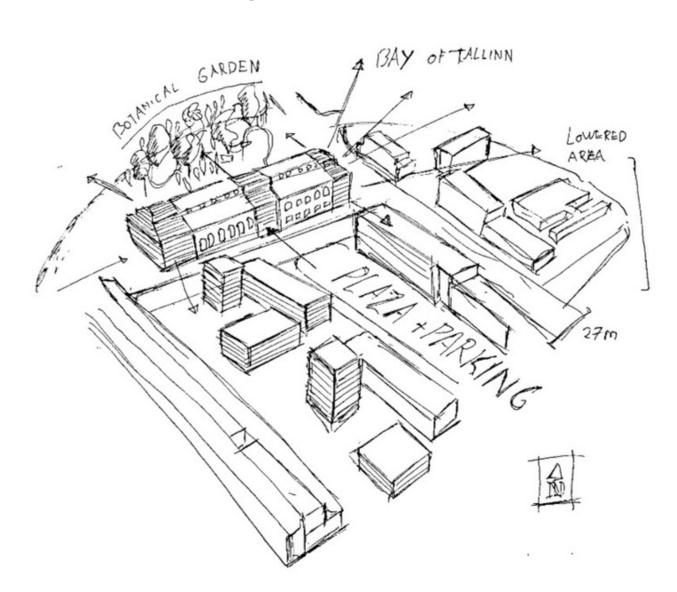
Cultural center

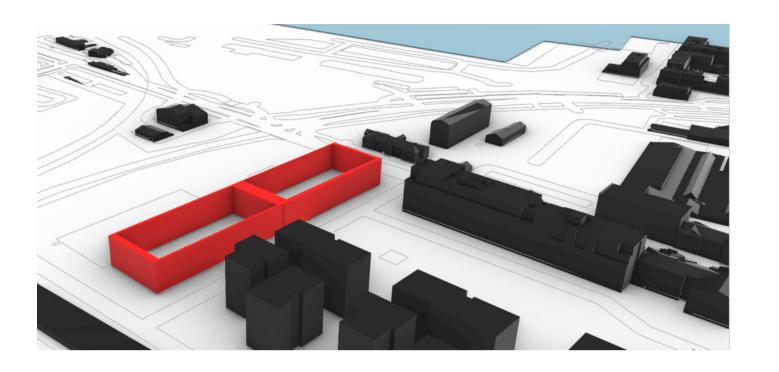
A mixed used building

Event centre and recollection space

For all age groups

To study, read and work



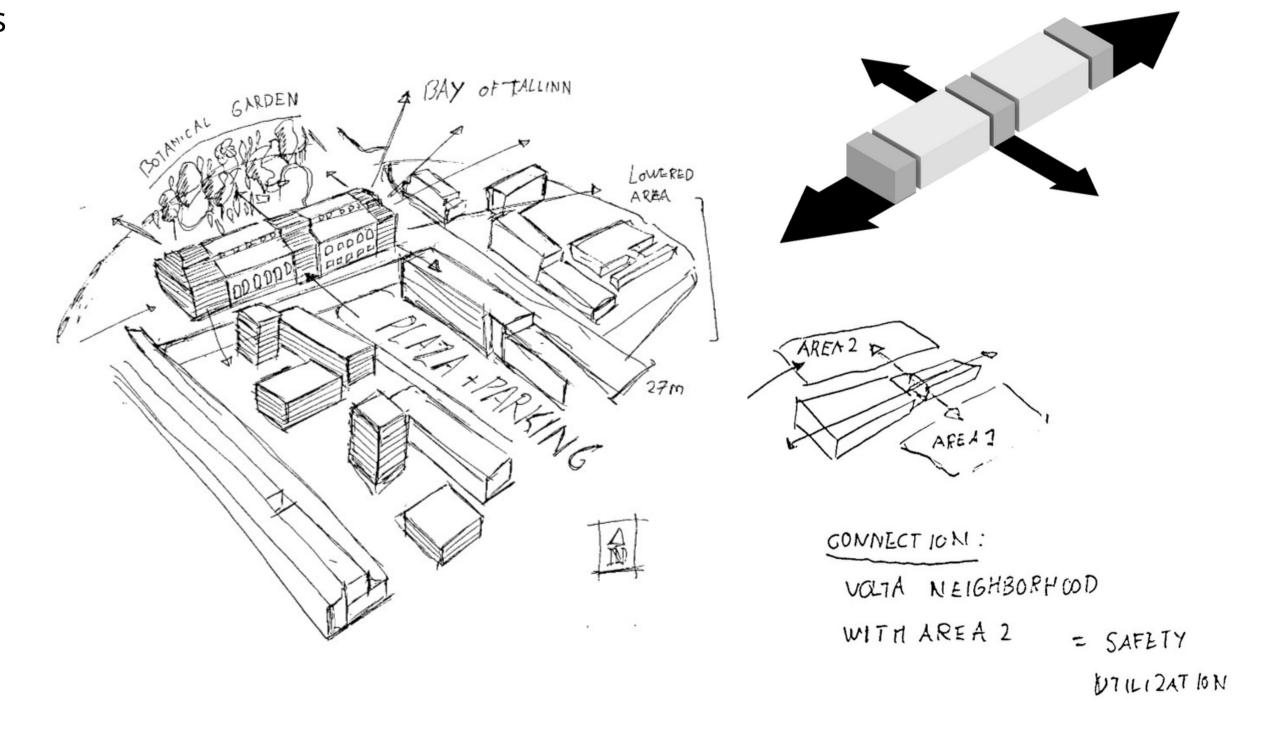




Crack the boundary

Add perpendicular axis to connect areas

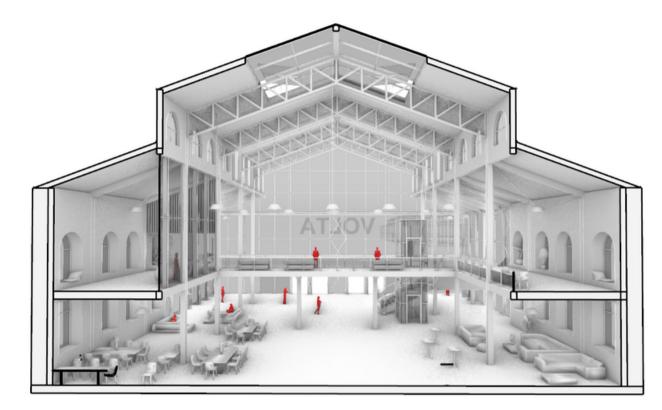
Improve flow by connecting areas + boost social cohesion



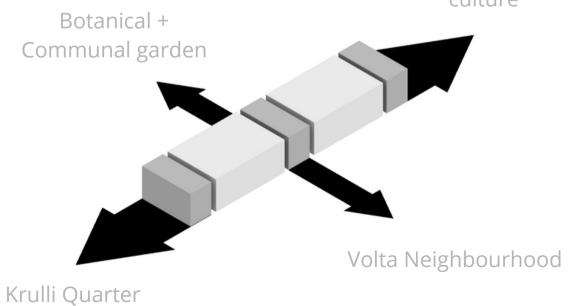
Cake principle

Open up towards the context

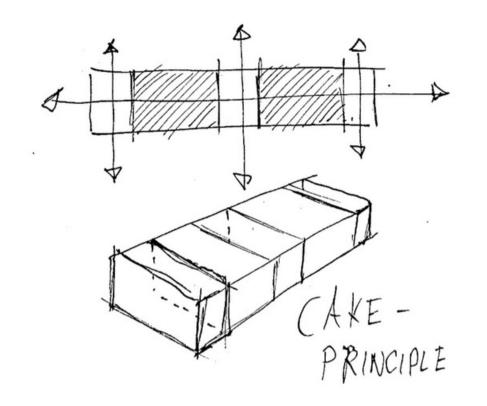
Natural light + hierarchy (social and less social split)

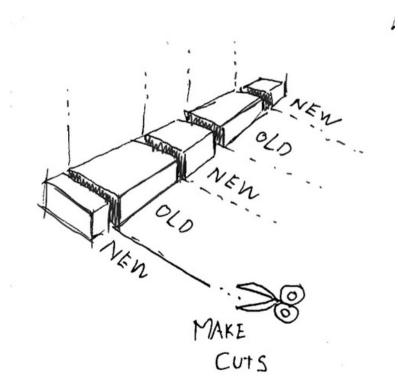






connection

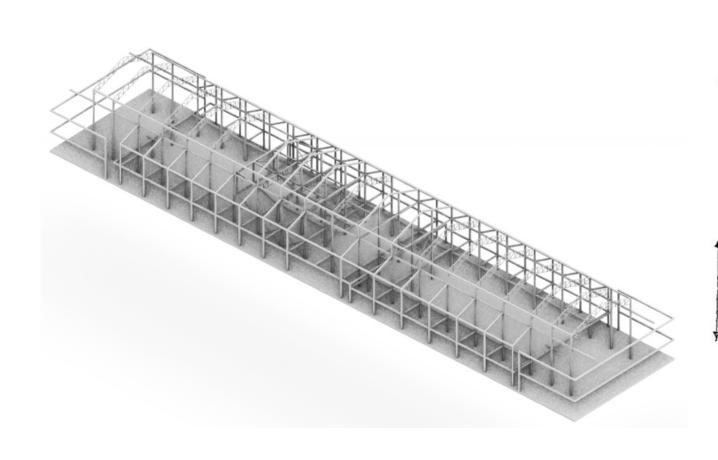


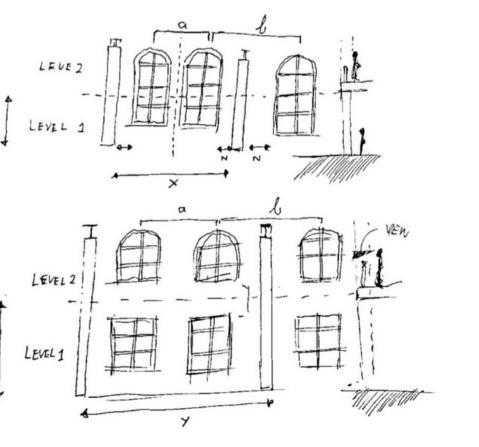


Box in a Box principle

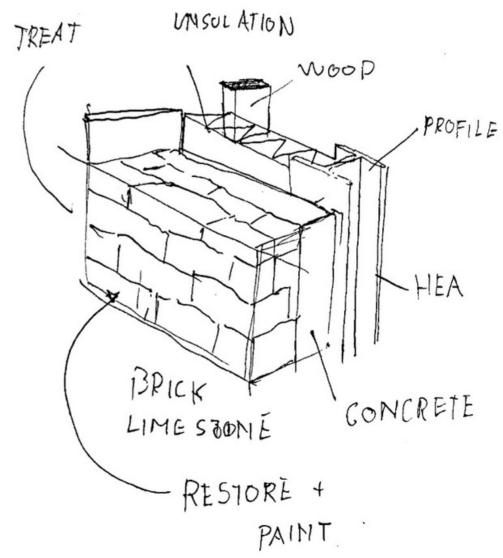
Preserve heritage and connect to it.

Adjusted support frame per section





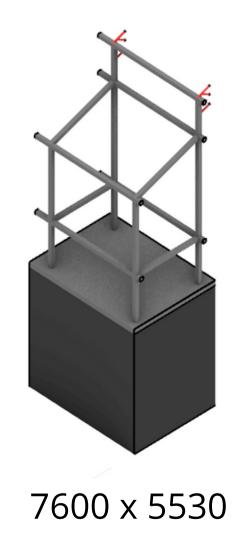


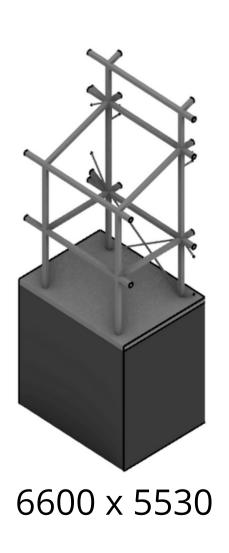


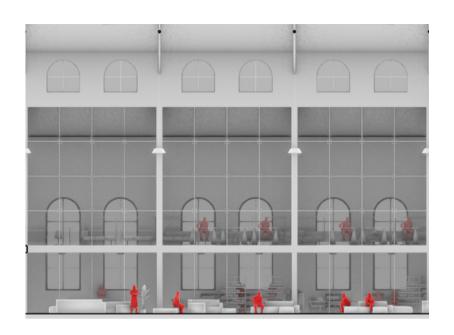
Flexible structure

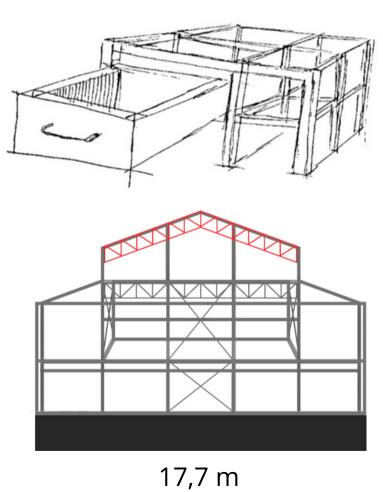
Divisible walls and grid

"Chest of drawers principle"







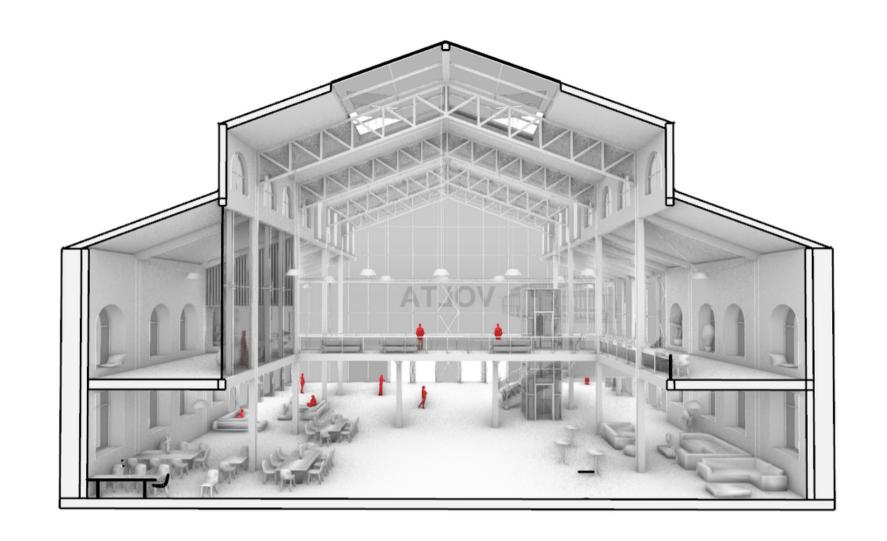


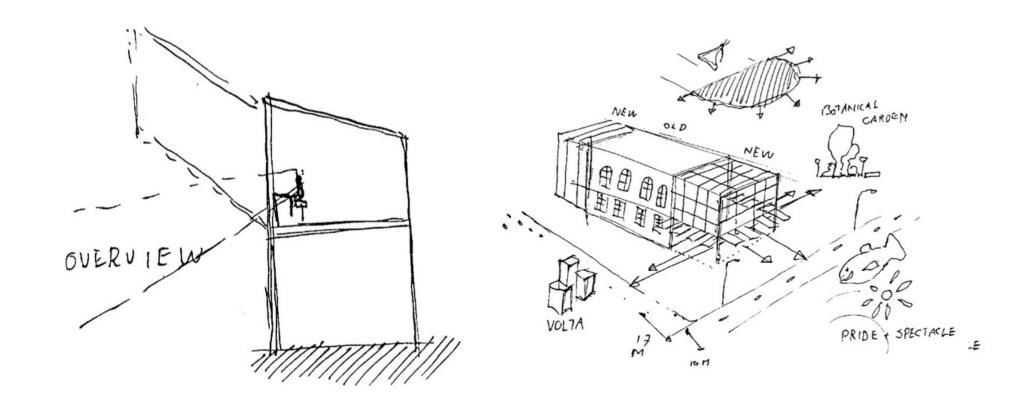
Transparency

Permeable bounderies with the outside: reconnect with nature

Overview and social control + cohesion

Greenhouses for a panoramic view + connection with gardens



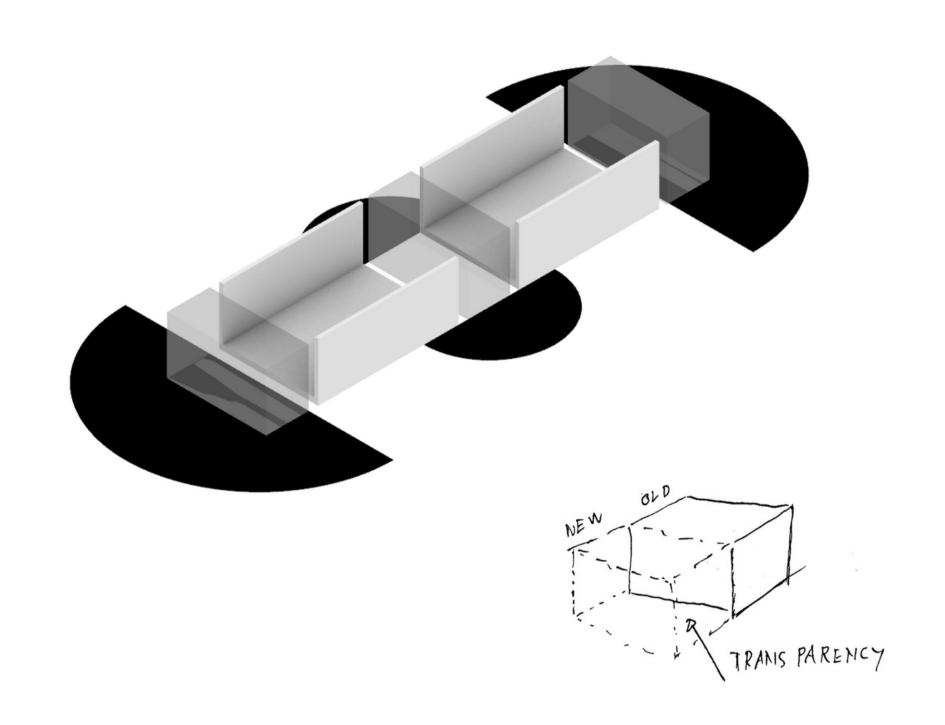


Transparency

Natural light
More inviting
Boost productivity

Culture: open up towards the Bay. Pride of Kalamaja

Lookouts/ spectacles in every direction

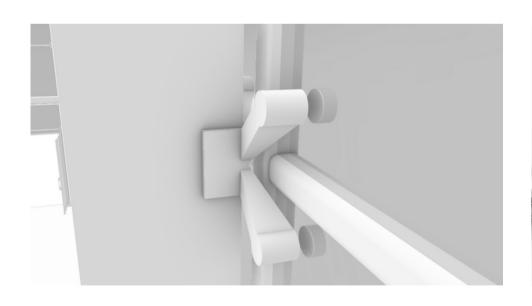


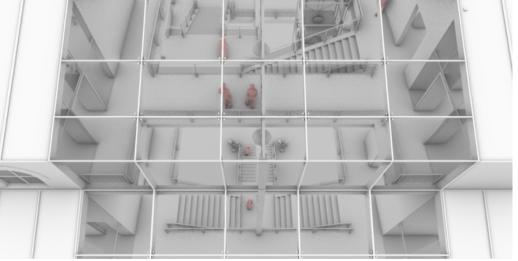
Spiderglass Facade

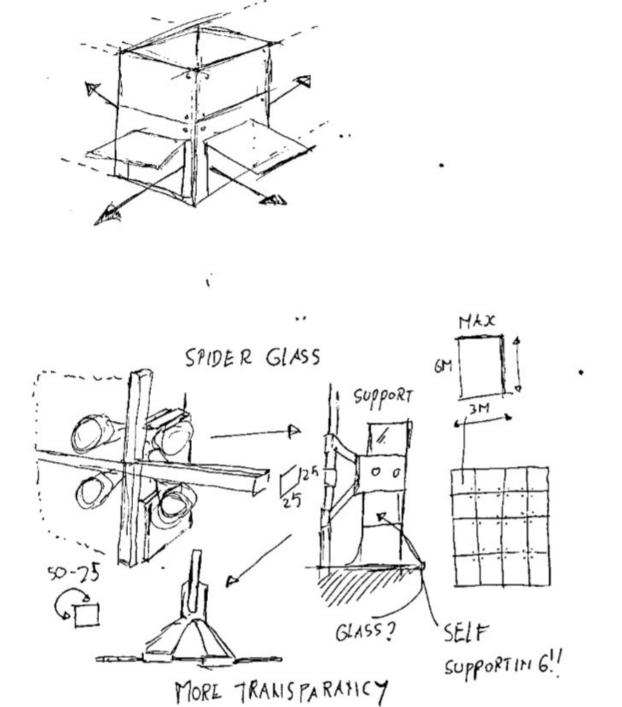
High Transparency + climate control

Anti glare

Self supporting







A Big cozy livingroom

Warm colours

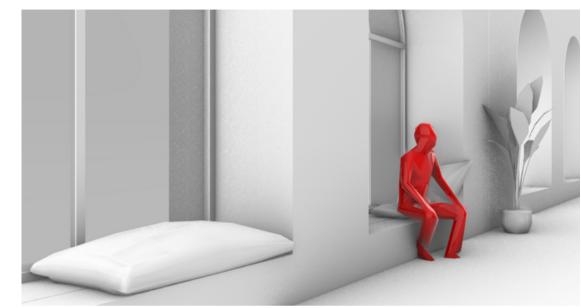
Places to sit ,recollect & socialize

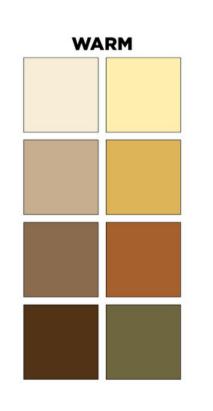
Coffee tables and couches

Entertainment & social initiatives







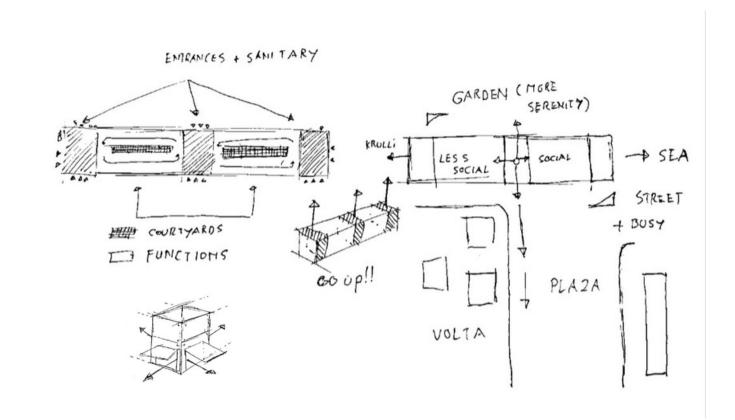




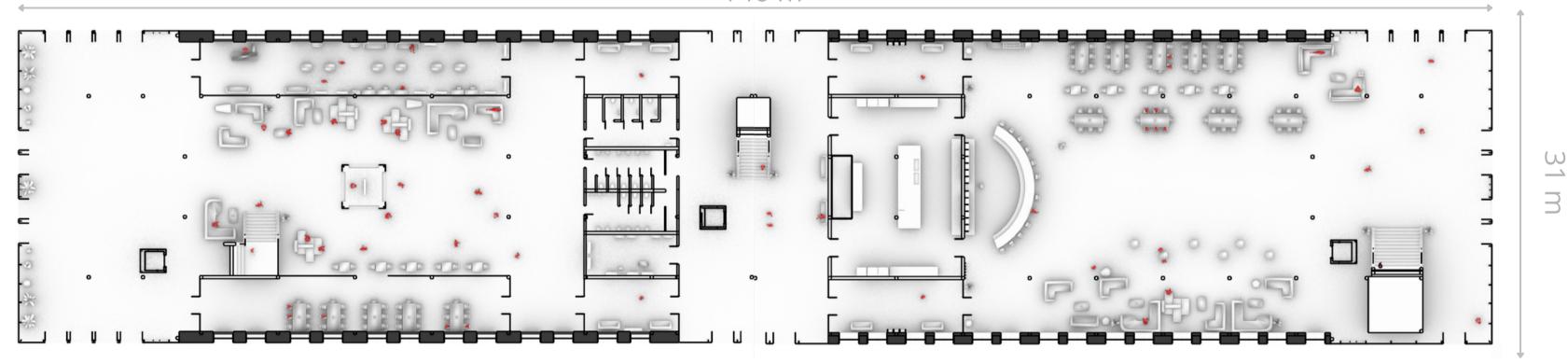
Ground Floor

Openable Facade - Permeable border according to seasons

Inviting Entrances



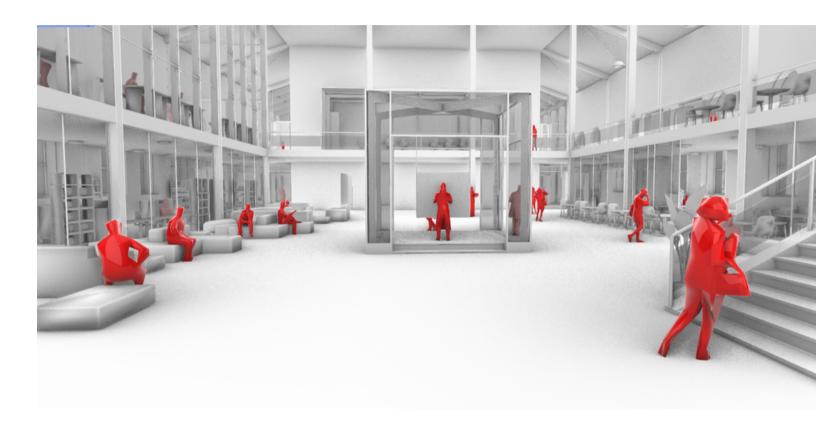
146 m



Library + restaurant + Garden storage (cultural hub)

Event hall + lounge + Kitchen

Cultural Hall





Eventhall





Library

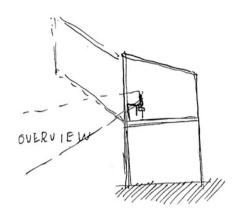




First Floor

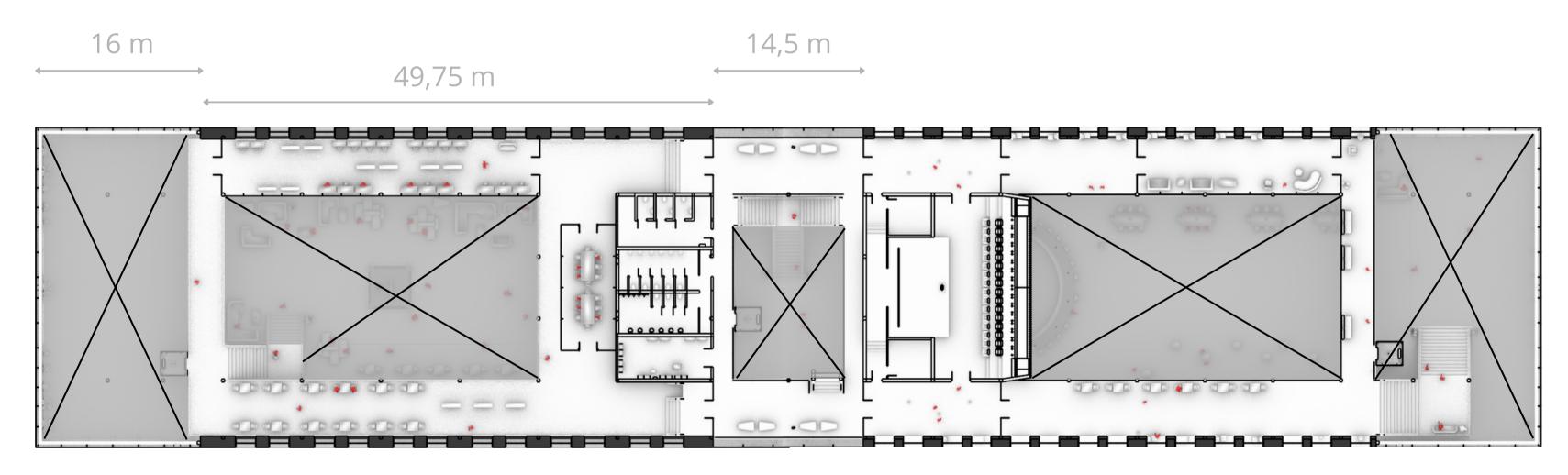
Voids to boost transparency and the courtyard concept







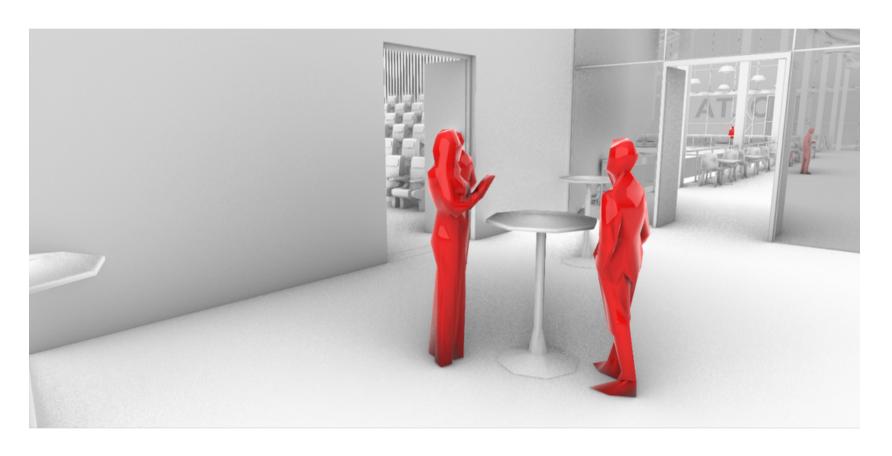
Study space lookout towards the garden + inner courtyard

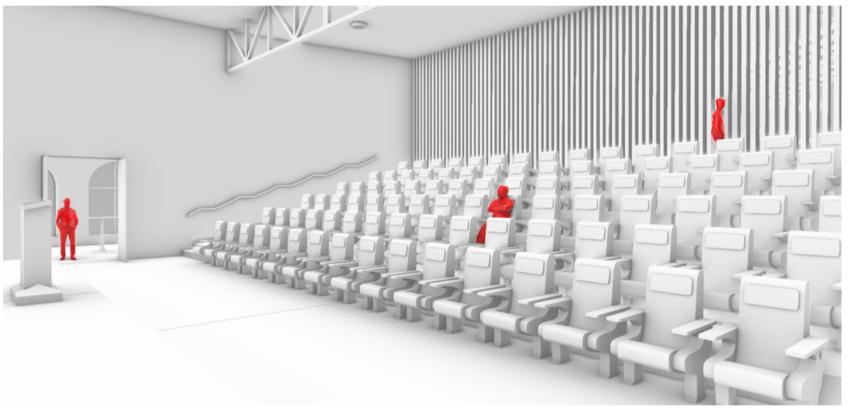


Restaurant, workshop & Enclosed Study space

Theathre +Lounge + spectacle (Bay lookout)

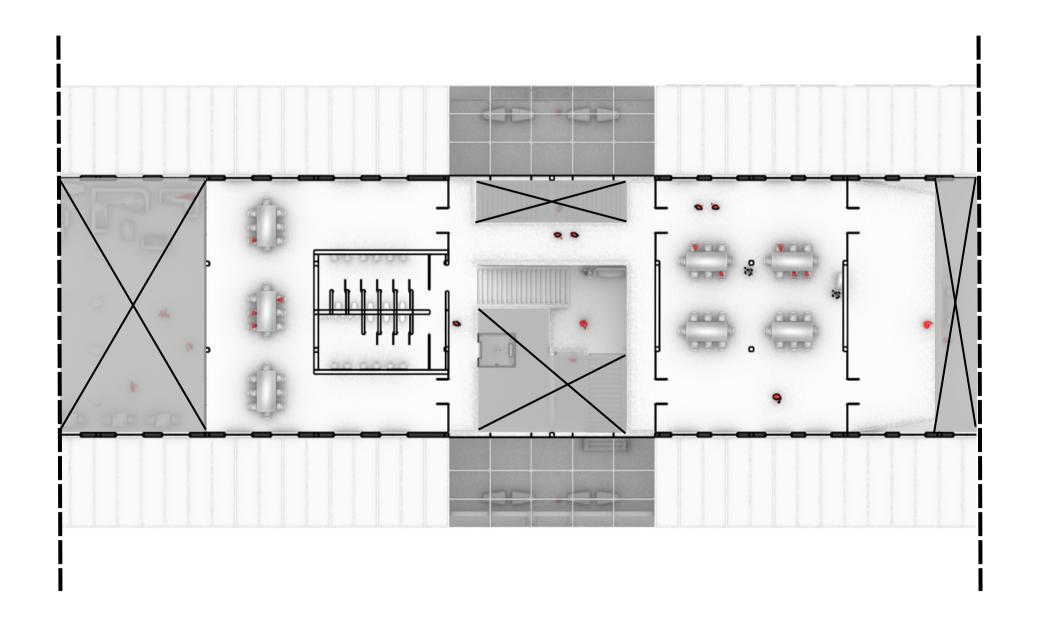
Small scale Theathre

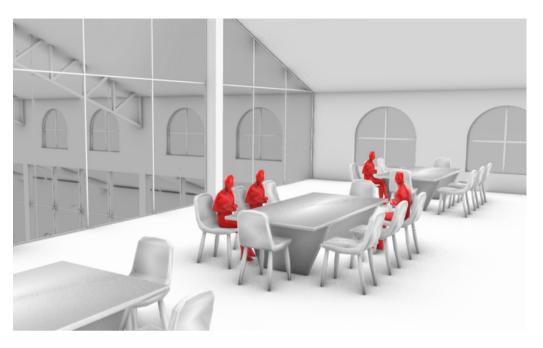




Second Floor

Rentable office spaces + balcony

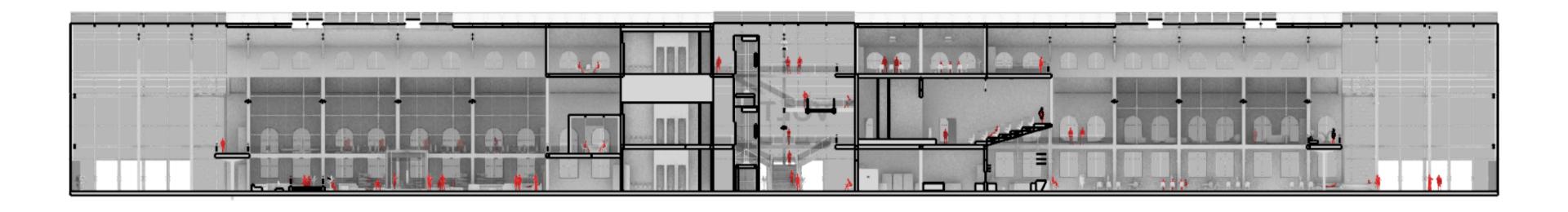


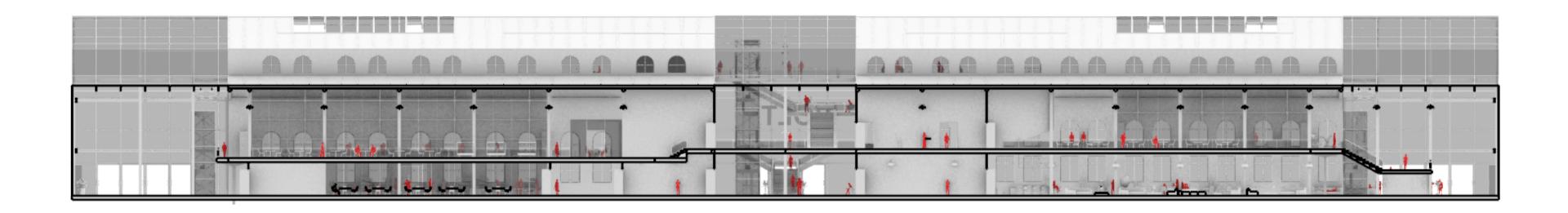






Sections



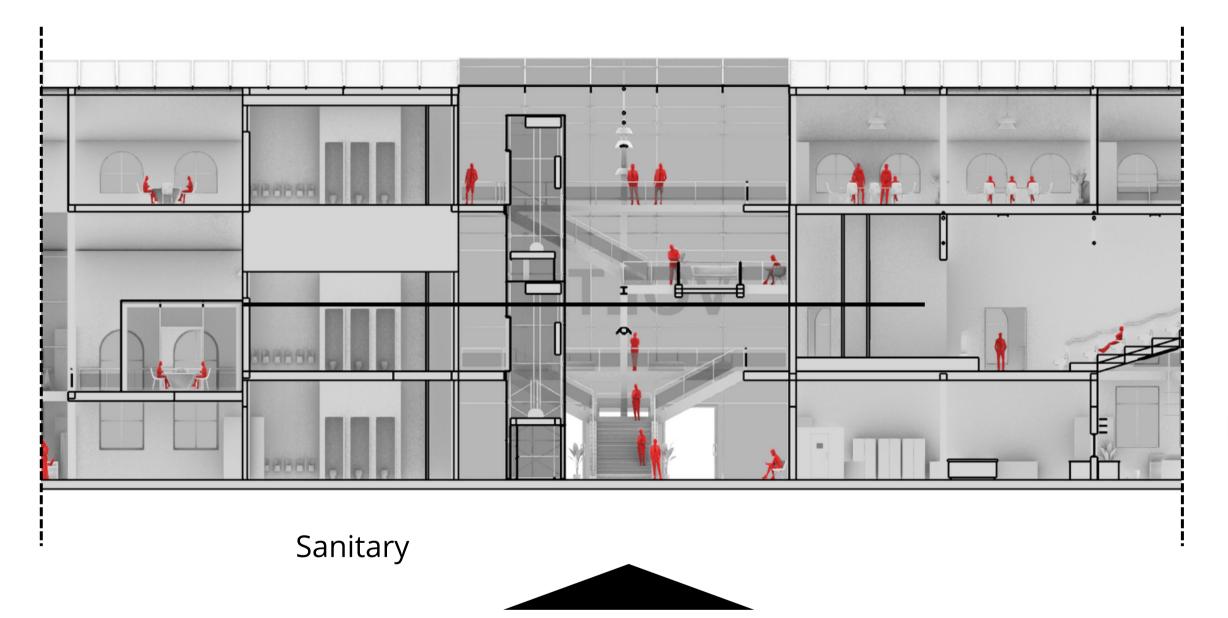


Center core

Office space

Meetingplace Workshop

Restaurant



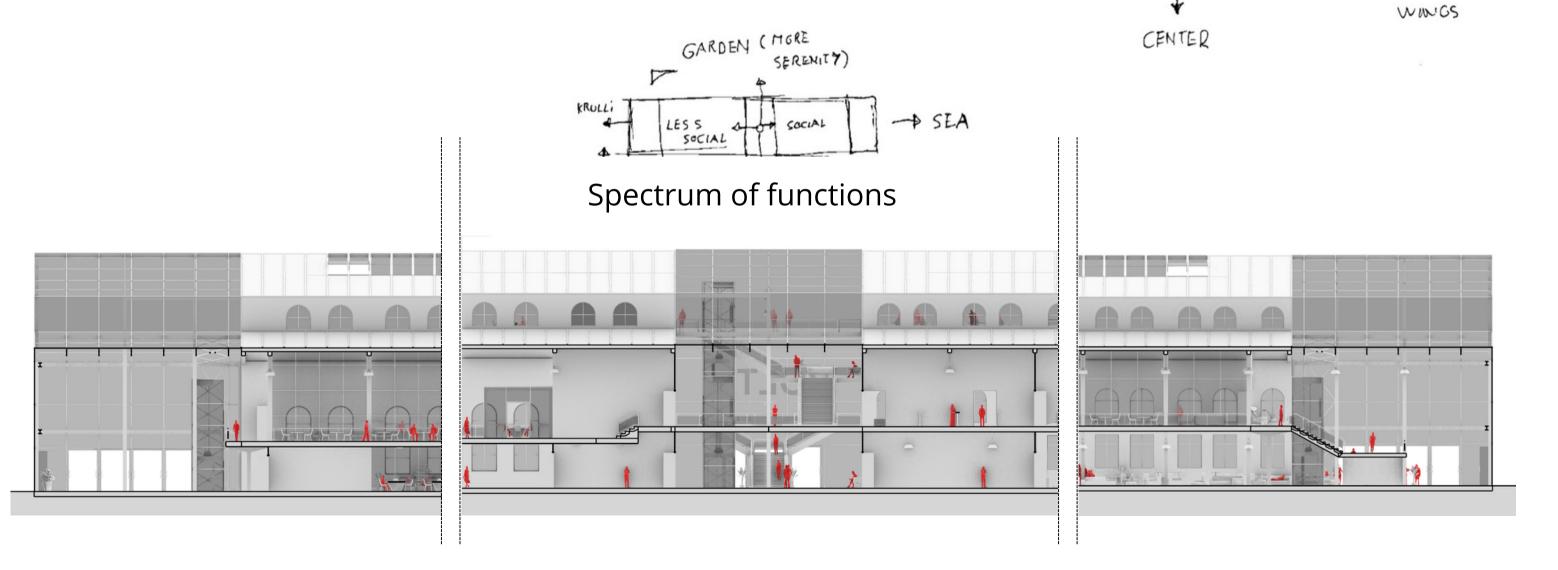
Office space

Theathre

Kitchen + Bar

Hierarchy

Core with two wings principle

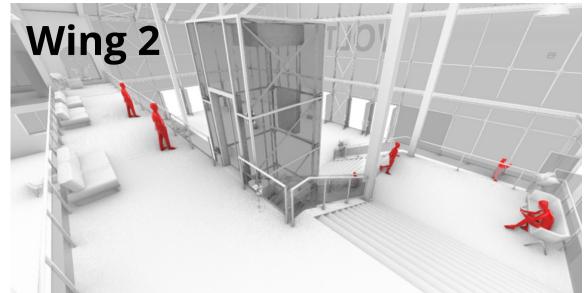


HIERARCHY

GORE

Core passage (toilets and recollecting space





Circulation area

Core and wings



