



#### **TYPALDOS TOWER**

54 THIRA STREET, ATHENS

#### AN EXAMPLE OF GREEK NEO- GOTHIC ARCHITECTURE

A' ARSAKEIO- TOSITSEIO LYKEIO EKALIS

RE-ACT! ERASMUS+ REANIMATING CULTURAL TREASURE!

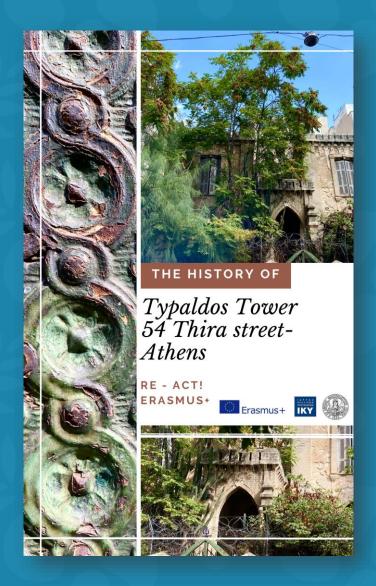






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#### PRESENTATION TEAM

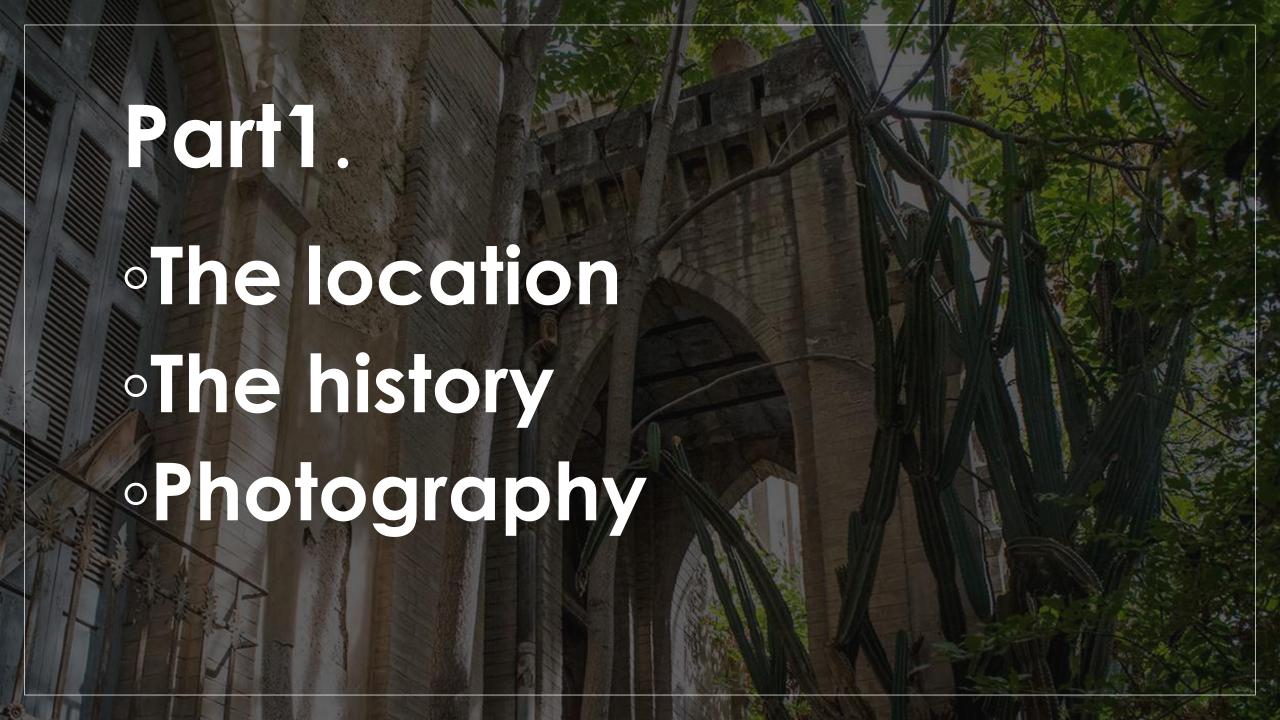


#### 1. History of Typaldos Tower-Photography

#### **Presentation**

2. Our proposal - Architectural designs

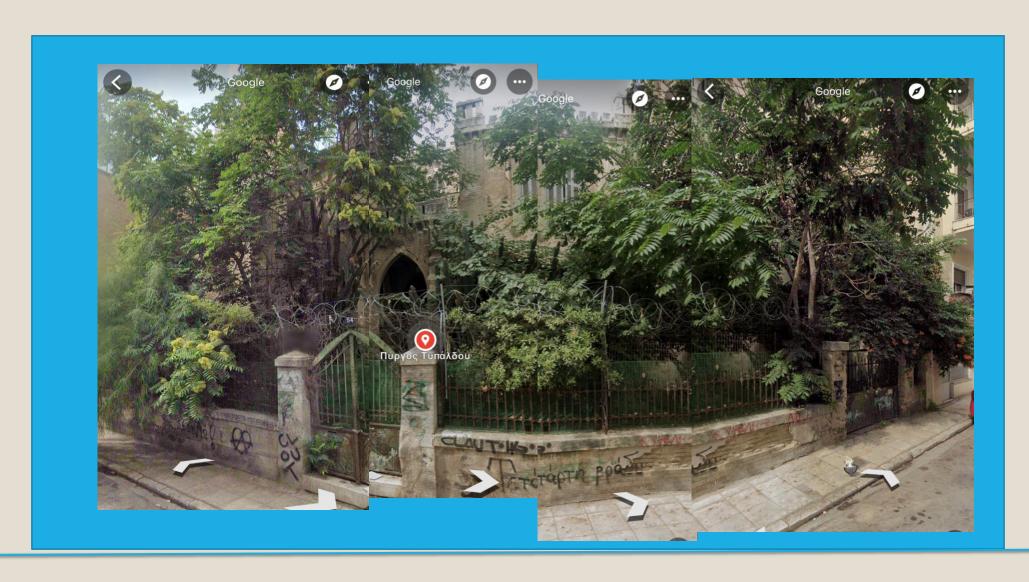
3. The eco - friendly reconstruction/ Bio - climatic choice



## LOCATION OF THE TYPALDOS TOWER

Typaldos tower is located in the center of Athens, between tall buildings and it looks like a fairy tale.

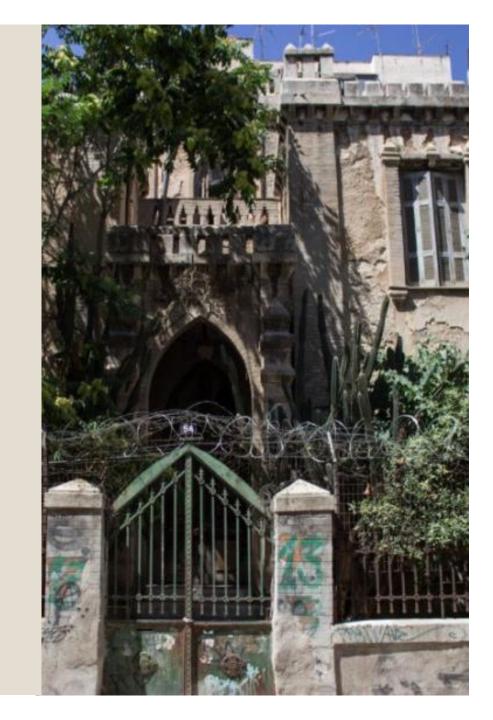




Typaldos Tower view Photo collage from Google earth

### History of the tower

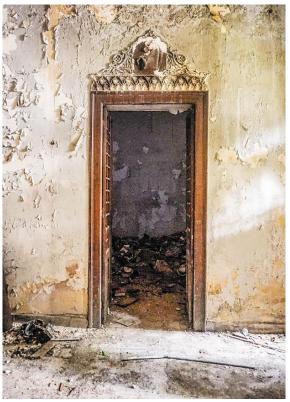
- beginning of the 20th century, built in 1914
- period of expansive urban planning in Athens
- owner George Alfonsatos Typaldos,
  Kefalonia (Ionian island)
- The peculiarity of the building is due to its neo-Gothic style.





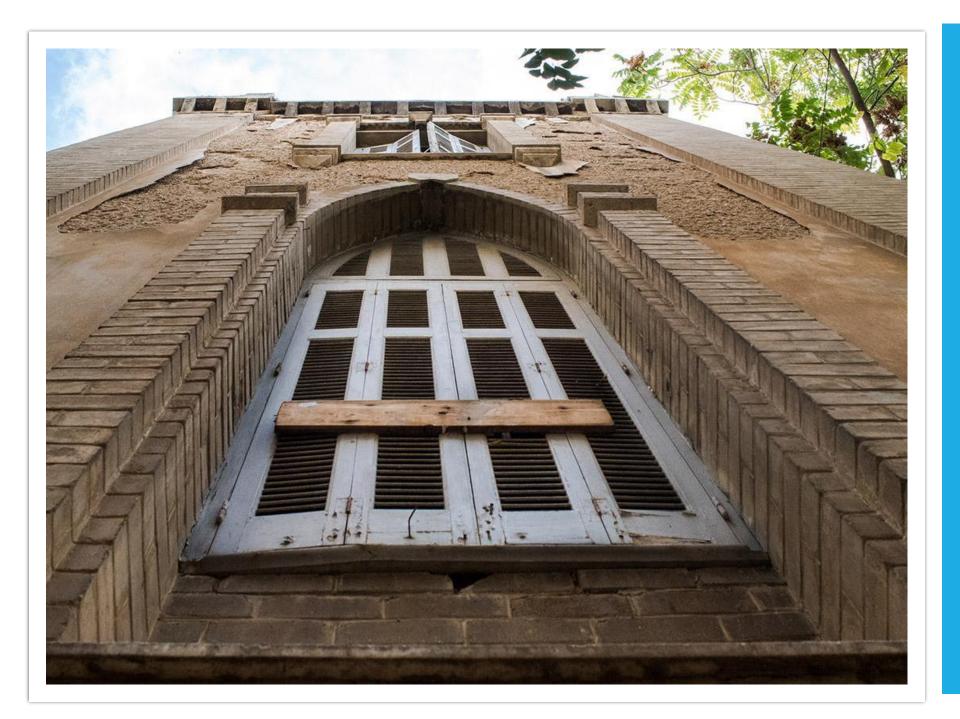




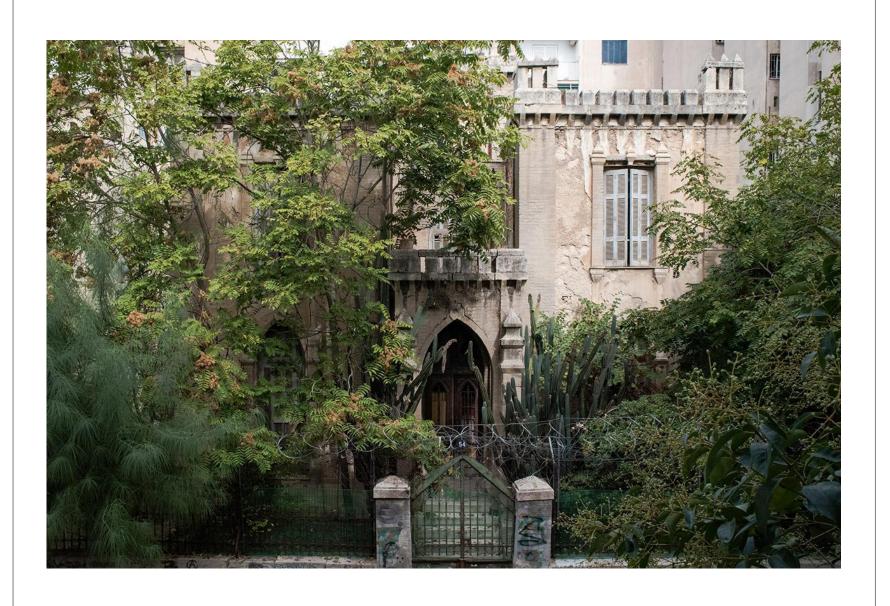


• The Typaldos family came from Italy in the 15th century.

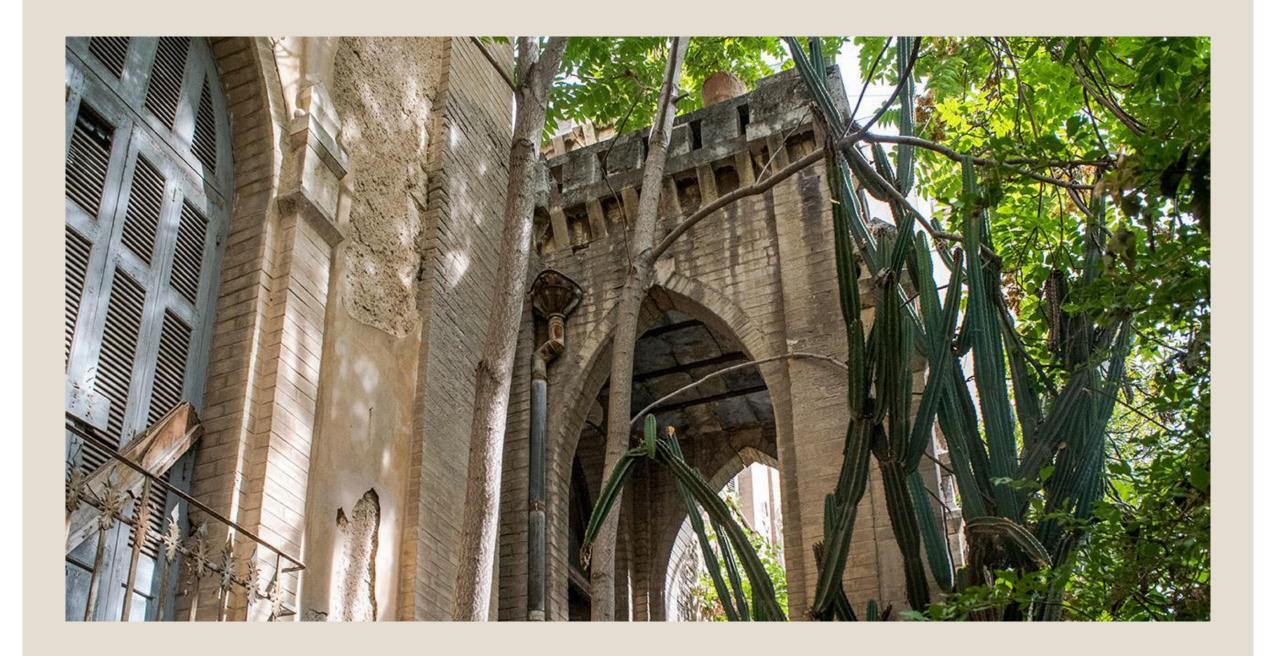
 History and prestige of the family are reflected in the architectural style chosen for their residence.



Walls and windows of Typaldos Tower



View of Typaldos Tower

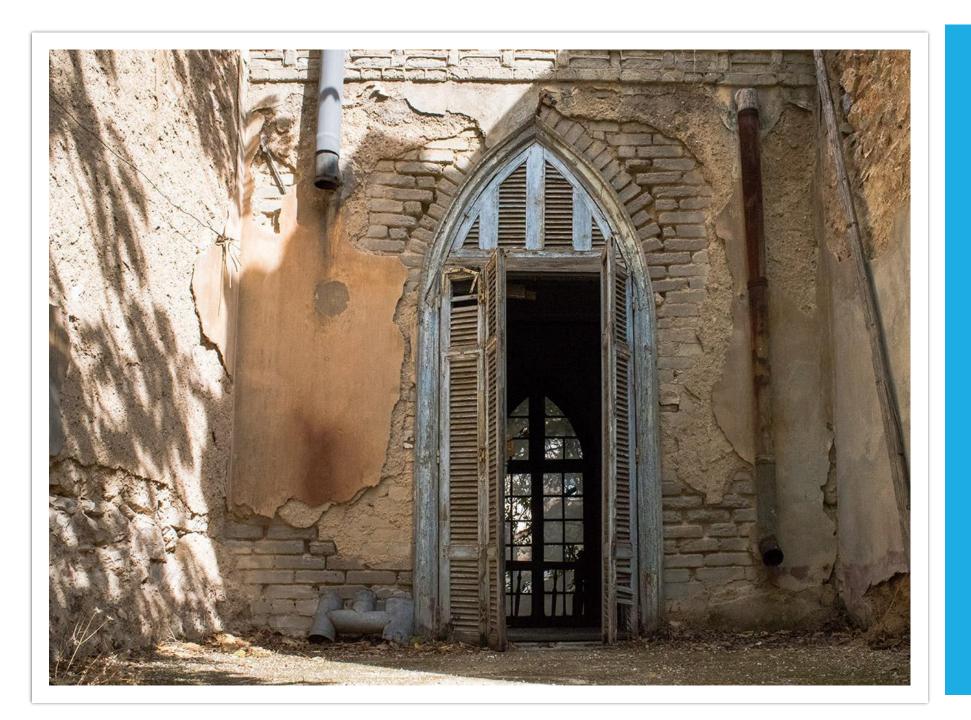




Neo-gothic details of Typaldos Tower







Neo –gothic arches for windows



### Our proposal

- It is proposed to be used as a bookstore and library in combination with a secondary space to be used as a gift shop and cultural event venue during the summer months.
- In this way the cultural factor compensates for the commercial and recreational factor. Lately, a modern suggestion is attempted to be implemented on this historical monument in order to leave a pleasant imprint on the mind of the visitor.

# DESIGNS FOR THE TOWER'S RECONSTRUCTION





#### Activities

Typaldos Tower could be used in many ways.

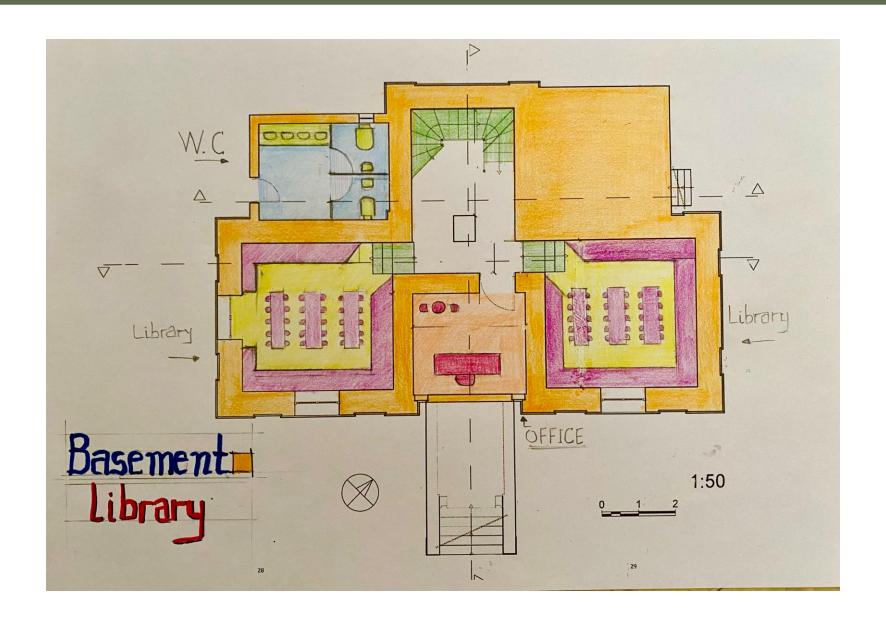
Some rooms could be used as study halls and lending library.

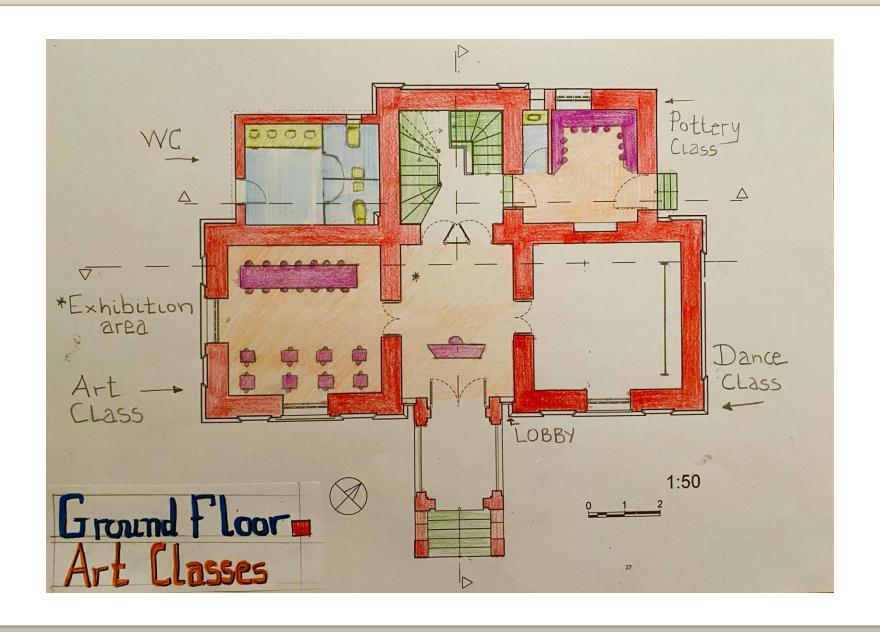
It could also host

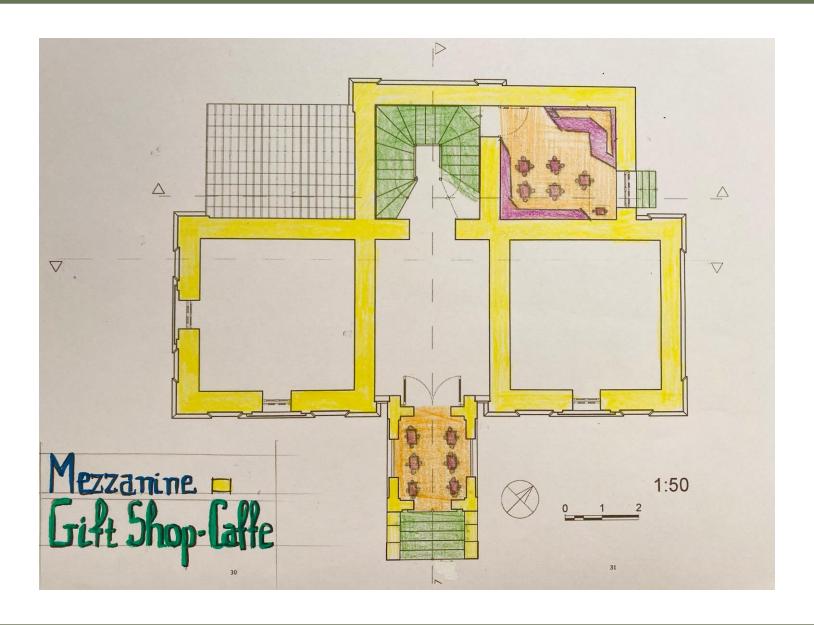
- foreign languages courses
- Greek for foreigners (immigrants)
- art classes

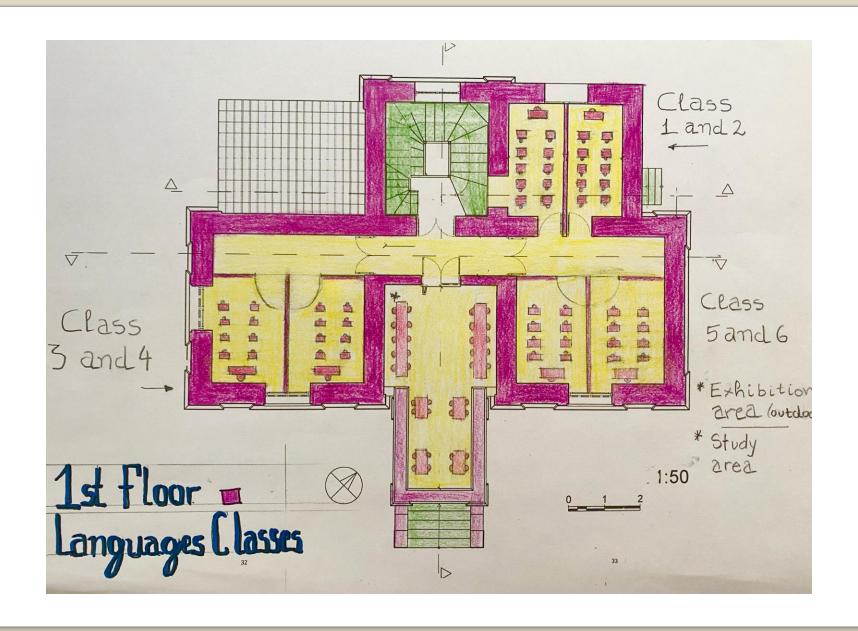
It is also ideal for **celebrations and feasts**, both indoors and outdoors.

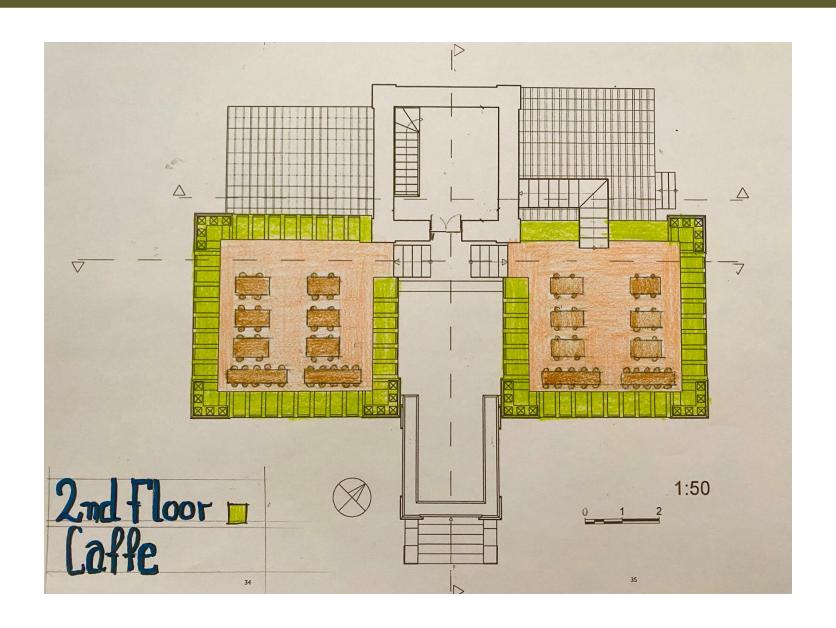
**Drama teams** or **dance groups** could rehearse and present their work in the community.

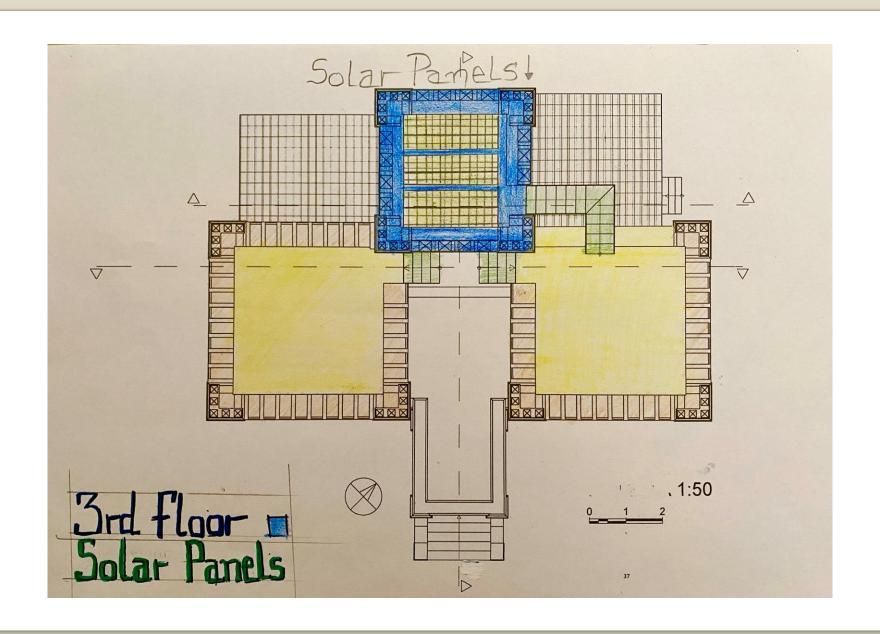












#### Garden

The garden of Typaldos Tower has a lot of trees which we use for the **sound insulation** of the building, the **shading** of the building and the creation of **coolness** during the summer months.



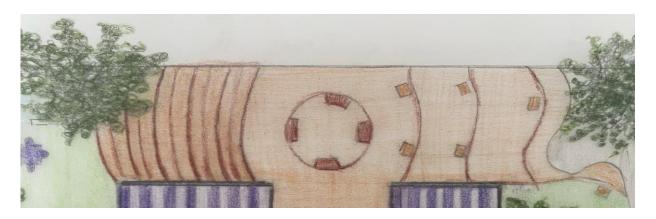




#### The Entrance

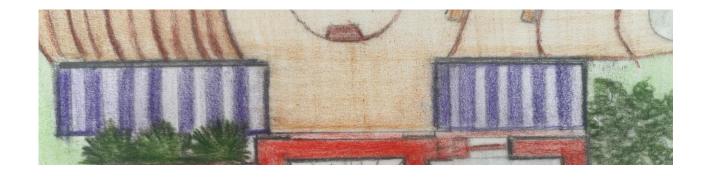
 The plants and trees of the entrance work for sound insulation but also for shading, creating coolness during the summer months.





# Amphitheater & Reading area

- The amphitheater will host performances, concerts and events.
- Students and visitors
  will be able to study
  and discuss in the
  reading area

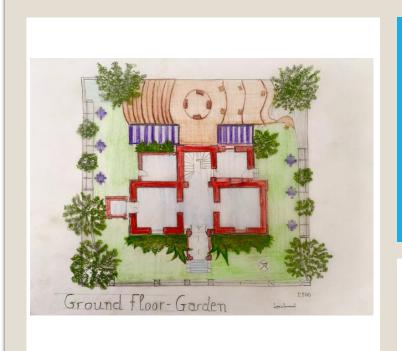


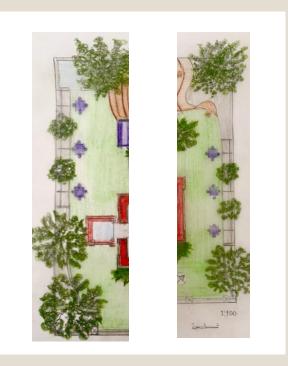


#### SHADES

The **shades** that we suggest to be placed in the garden have **multiple uses**.

They can be used for shade but also for extreme weather conditions such as rain

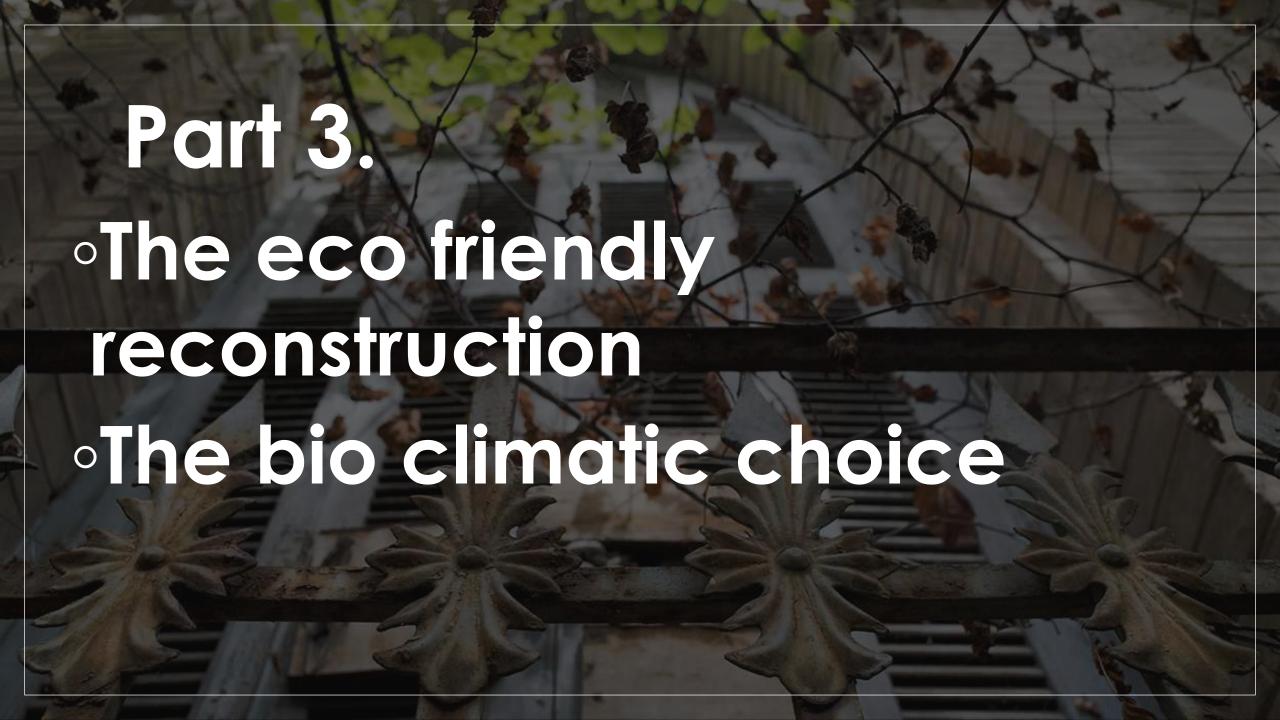


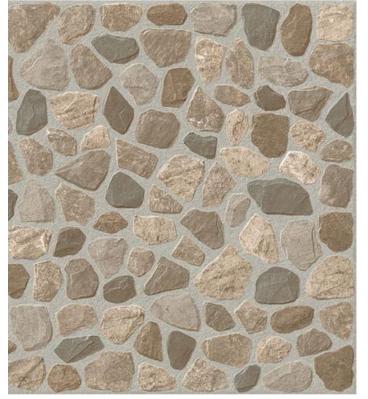


#### Reading area

On both sides, an outer **fence** can be constructed.

Benches, tables and chairs can be placed in the same space in case of events.





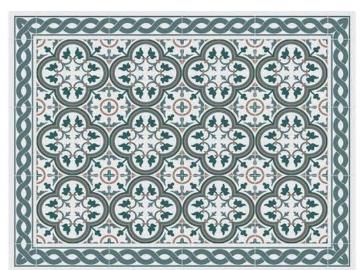


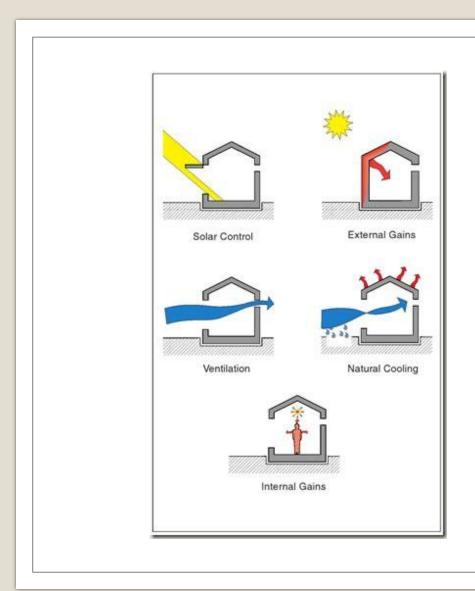


# The eco friendly reconstruction

Eco friendly building materials for the reconstruction of the tower:

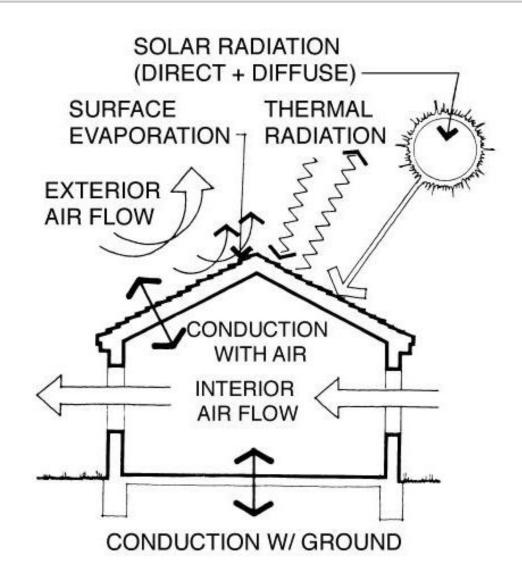
- Stones
- Ceramic tiles
- Wood for the doors and staircase
- Utilization (recycling) of existing materials





#### Bioclimatic choice

- bioclimatic architecture
- solar energy and other renewable sources
- the local climate, commonly referred to as the microclimate, as well as the properties of building
- materials and architectural elements



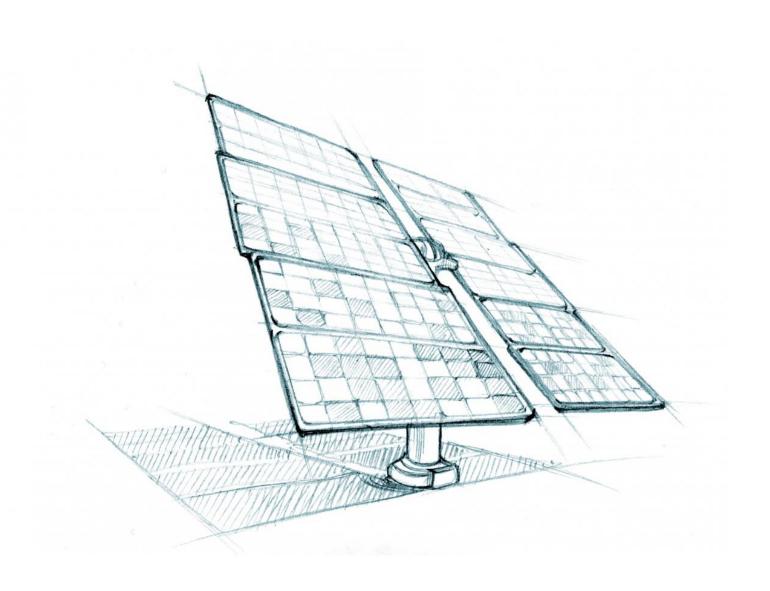
Paths of energy exchange at the building microclimate (Watson and Labs 1993)

## Specific objectives of Bioclimatic Design

- Sun in winter
- Protection from winds
- Minimize heat loss
- Protection from summer sun
- The exploitation of cool winds in summer.
- The removal of excess heat in summer

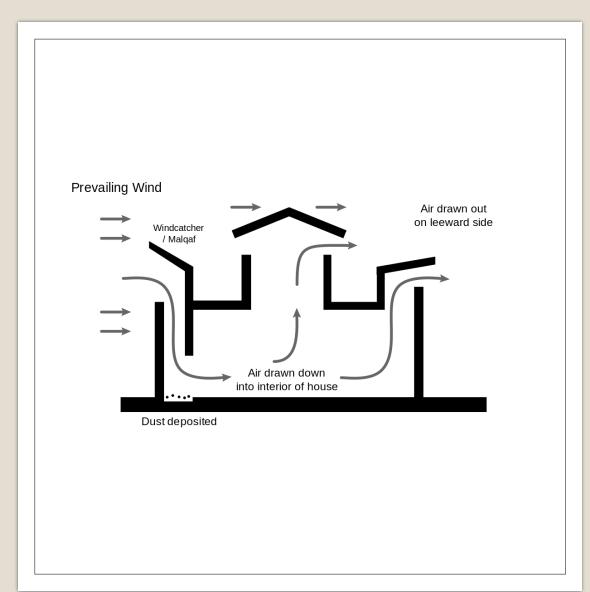
#### Surrounding area

- We need to pay attention to the microclimate around the building.
- The vegetation can be used for sun protection, shading and protection from the winds.
- The building has many trees that protect the microclimate not only in the winter but also in the summer.



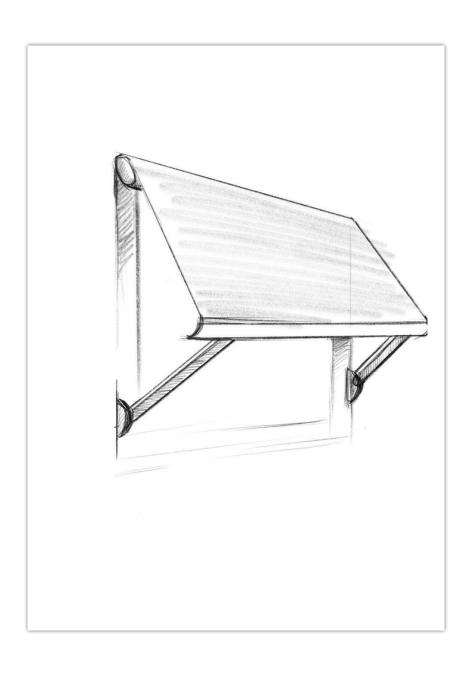
#### SOLAR PANELS FOR THE TOWER

The solar panel is a device that accumulates solar radiation and converts it into heat.



# Passive natural cooling systems

- Ventilation of the building is very important.
- It helps to remove excess heat and therefore keeps the building cool in the summer months.



#### Shades

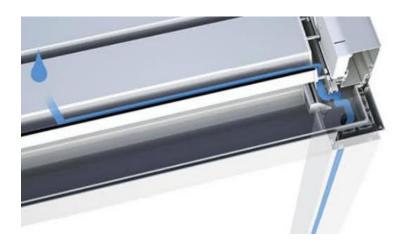
- Exterior shades with movable blinds are the most effective way of shading.
- Specifically, horizontal exterior shades are recommended for the south side and vertical exterior shades for the east and west side of the house.



Shades for the garden



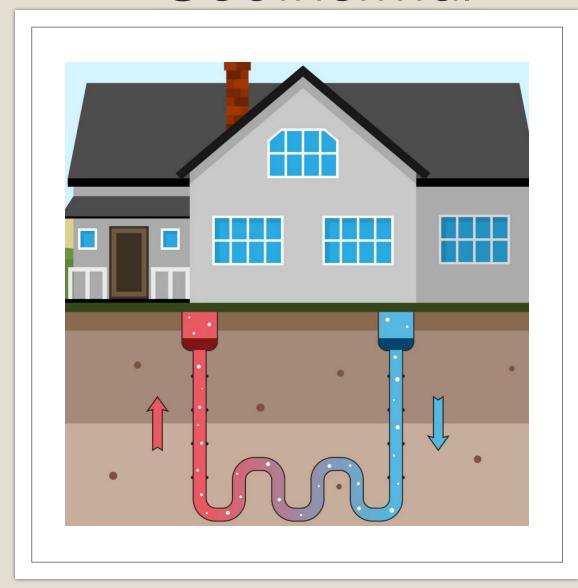








#### Geothermal



 With the geothermal heat pump and the piping network that is placed a few meters below the surface of the ground achieving the heat of the liquid element (well, sea, lake, etc.), (from and to the ground) and maintaining the temperature of the water that we are interested in constant (around 20C-23C).

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# THANK YOU FOR YOUR ATTENTION!

